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A MANUAL OF

MEDICAL JURISPRUDENCE,

WITH SPECIAL REFERENCE TO

DISEASES AND INJURIES OF THE

NERVOUS SYSTEM.

BY

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WITH ILLUSTRATIONS.

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TO MY FATHER,

PHILIP HAMILTON, Esq.

WHOSE HONORABLE CAREER

AND UNBLEMISHED LIFE,

BRING TO HIM THE

REWARD OF

HAPPY OLD AGE.

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PREFACE.

This little book is presented as an elementary treatise, and book of reference, for lawyers and doctors.

Its scope is limited, for I have considered only those conditions of the nervous system which nowadays are so often the bases of litigation; and as a guide in such cases I trust it will prove useful.

20 East 29th St., N. Y.

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INSANITY.

CHAPTER I.

GENERAL CONSIDERATION.

Definition.—No definition of *Insanity* exists that will stand legal analysis, and it is exceedingly unwise in courts of law to attempt to give one. It is a favorite method with lawyers to make the medical witness commit himself in defining the word, and then hopelessly entangle him in quibbles.

For practical purposes INSANITY may be said to be an impairment of the mind, manifested by intellectual, moral and emotional perversion, and due to physical changes of the brain, other than those temporarily produced by intoxicants, or the poison of fevers.

The two definitions that are the most satisfactory are those of Bucknill and Maudsley.

The former defines insanity as "a disease of the brain (idiopathic or sympathetic) affecting the integrity of the mind, whether marked by intellectual or emotional disorder."

Maudsley's definition is as follows:

"Insanity is, in fact, disorder of brain, producing disorder of mind; or, to define its nature in greater detail, it is a disorder of the supreme nerve centers of the brain,—the special organs of mind,—producing derangement of thought, feeling, and action, together or separately, of such degree or kind as to incapacitate the individual for the relations of life. Mind may be defined physiologically as a general term, denoting the sum total of those functions of the brain which are known as thought, feeling, and will. By disorder of the mind is meant disorder of these functions."

It will be seen that Bucknill insists upon actual *disease* of the brain while Maudsley rather leans to the view that the mind as a function is disordered, and he makes the distinction, however, calling attention to the fact that numerous diseases of the brain are not attended by *insanity*, but are attended by

mental changes. I prefer the definition of Bucknill which comes more directly to the point, and until experimental psychological-physiology and pathology enable us to localize the supreme mental centers, we cannot be more exact.

Legal Definition.—Bucknill advises the medical witness who is asked to define insanity, that he should, in addition to the medical definition given above, add the words, " that the cerebro-mental disorder is such as to suspend or impair the action of the healthy will."

General Indications of Insanity.—The expressions of insanity are of the most varied character, and in the examination of any particular case, it should be our aim to determine the existence and meaning of any change in temper or habits, and any unlooked for act whether the result of premeditation or morbid impulse. There are also physical alterations, as well as mental. Of course the evidences of such a departure from the normal state as we are often called upon to explain, vary with the forms of insanity, of which there are many.

The indications of a disordered mind are manifested in disturbance of the emotions, the reasoning powers, the judgment, the memory, and the will of the individual, and though various types of insanity resemble each other, no two cases can be said to be exactly alike. We should be on the alert to discover the presence of delusions, hallucinations and illusions, the evidences of impaired will power, the feebleness of the memory, and the alteration of the moral nature of the patient.

Classifications of Insanity.—The following great divisions of insanity may be made:

Idiocy.
Imbecility.
Mania, } Acute and Chronic.
Melancholia, }
Dementia.—Primary and Secondary.
General Paresis of the the Insane.

DICKSON'S CLASSIFICATION.

One of the best classifications of Insanity is that of Dickson.*

* Medicine in Relation to Mind. p. 412

- Insanity.
  - Sub-Class Dementia.
    - Variety I. Involving emotions; delusion not necessarily obvious but reasoning power impaired or overwhelmed.
      - A. Excitation.
      - B. Depression.
    - Variety II. Involving intellect; delusion essential, reasoning power not necessarily impaired but judgment warped.
      - A. Excitation. (*Mania*).
      - B. Depression (*Melancholia*)
    - Variety III. Involving all the mental faculties; delusion not essential.
      - Passive state. (*Dementia*)
  - Sub-class Amentia — Congenital deficiency of mental faculties.
    - Idiocy.
    - Imbecility.

There are various classifications which might be reproduced in these pages if space would permit. Some of them deal with the etiological factors. Those of Pritchard, Griesinger and Maudsley divide mental disease into two classes, the Intellectual and Emotional. The Germans, notably Krafft Ebing, are fond of generalization, and we consequently find very elaborate terminology. A favorite scheme in this country is that of Ray which is the following:

RAY'S CLASSIFICATION.

- Insanity.
  - Deficient development of the mental faculties
    - Idiocy
      - from congenital defect.
      - from arrested development in infancy.
    - Imbecility.
      - from congenital defect.
      - from arrested development in infancy.
  - Lesion of mental faculties, subsequent to their development.
    - Mania (of Ray)
      - Intellectual; mainly affecting the intellect.
        - General
          - Mania of authors, excitation of the faculties
          - Melancholia or lypemania of authors, depression of faculties.
        - Partial
      - Moral; mainly affecting the will.
        - General
          - Monomania of authors
          - Partial affection of the faculties.
        - Partial.
    - Dementia.
      - Consecutive to mania or injuries of brain.
      - Senile, peculiar to old age.

(See Appendix A.)

Monomania, Moral and Partial Insanity.

There is scarcely a classification that does not include subdivisions of the above, and many of them embrace, like that of Ray, *Monomania*, *Moral* and *Partial Insanity*. When it is remembered that in nearly all carefully studied cases of either Melancholia or Mania, though there is a prevailing delusion, there is as well a variety of others. The term *Monomania* is an impractical refinement. So too, *Moral Insanity* I am convinced should have no isolated place, for I do not believe that such a condition can exist without general intellectual perversion, which latter, however, may be masked or obscured. It is impossible to have insanity limited to one faculty of the mind so I think the term *partial* is a misnomer as well when applied to a diseased mental state, and much confusion arises from confounding "partial responsibility," which may exist, with partial insanity which I believe we have no more right to consider than "partial" malaria or "partial "syphilis. These terms are only relative at best, and are convenient but dangerous. It is universally conceded that there may be forms of general insanity in which certain delusions predominate, or in which there may be a conspicuous defect in the morals of the individual, but this is all. Various convenient terms have been used to express the dominant character of the patient's insane tendencies, and these are valuable in a nosological sense. We find allusion to *homicidal mania*, *suicidal mania*, *crotomania*, *dipsomania*, *kleptomania*, *pyromania*, etc. So too, other varieties of insanity derive their names from their causation or circumstances under which they appear.

Somatic Classification.—*Post Connubial*, *Puerperal*, *Climacteric Insanity* are applied to various conditions of sexual development, excitement, or decay, as are *Nymphomania*, and *Satyriasis*, and *Masturbatic insanity*. *Toxic*, *Diabetic*, *Metastatic*, *Syphilitic*, *Epileptic*, *Phthisical*, and *Traumatic insanities* are varieties dependent upon poisoning, disease or injury, while we speak of "Senile" dementia to qualify the condition, by suggesting the question of age in regard to that particular disease, or *Pubescent* insanity to indicate the fact that the mental disease is connected with the general development of change that occurs at adolescence.

The terms used by Skae * include many of the above as well as

* Journal of Mental Science, Oct., 1873.

others having a pathological significance. He further divides idiopathic insanity into *sthenic* and *asthenic* with regard to the dynamic expression of the mental derangement. The true division of the subject, however, should be a simple one, and it is injudicious to specialize etiological conditions, which may, after all, have the same method of expression.

The first three varieties of insanity to be considered are those characterized by mental feebleness and include *idiocy*, *imbecility*, and *dementia*. The first is considered by some authors to be *congenital* and *acquired*; I think, however, the so-called acquired idiocy should be defined as imbecility.

Idiocy, then, is a congenital condition manifested by imperfect development of both mind and body. The idiot is either *non compos*, or his capacity is, as Pinel has observed, below that of another person of his own age. In some cases the intelligence is even upon a par with that of some of the lower animals, and his mental expression is chiefly emotional. He manifests feeble degrees of pleasure when he is shown bright objects, and indulges in fitful and short-lived gusts of passion without cause. He delights in rhythmical musical sounds, and is fond of repeating one word over and over, or indulges in automatic movements.

The instinct of the idiot is animal, and his habits are of the most repulsive kind; without the restraint of judgment he gratifies every appetite, however low. In completely idiotic persons there is no sign of recognition, no indication of memory, and the intellectual capacity is not to be compared to that of some intelligent animals. There is the absence of the mental apparatus, the absence probably of a sufficient number of sensory cells and their connecting filaments, and the result is the absence of mind.

Balfour Browne says: "Thus we see that an idiot is a person so thoroughly without mind that all mental cultivation has been, and is, out of the question. It is as difficult to make money without some capital, either in money or the power to labor, as to acquire knowledge without a brain. To distinguish idiocy clearly from dementia with which it is sometimes confounded, it must be remembered that the former is a congenital absence or at least serious defect of all the faculties of mind, while dementia may be regarded as the gradual obliteration of faculties which have been possessed."

There are idiots, however, in whom the imperfection of the cerebral structures is not so extreme, and in whom the above-

mentioned condition of mind does not exist to so great a degree. We find in every asylum many idiots who in some ways manifest a partial brightness, if it may be so called, of a few faculties. They are docile and tractable. It is possible to do a great deal for them, and they may be taught much more readily than the imbeciles whose weakness results from disease. The idiotic child may be sometimes taught to talk, to read, and with great care and training by means of object teaching and judicious discipline, he may be raised to a level much above that he once occupied.

Head Configuration of Idiots.—Idiots often present peculiar physical defects which are sometimes remarkable, and this is especially the case in hereditary cases. The configuration of the head is one of these, and Broca has described several varieties, the most important of which is the *microcephalous* head. The diminutive head may have a circumference of but thirteen inches, and an exceedingly great facial angle. Broca holds that the possessor of a skull with an antero-posterior diameter of 148 millimeters is a *microcephale*.

Of the two principal varieties the dwarfed idiot, and the idiot of ordinary height (*les nains, et les invidus de taille ordinaire*) the latter are almost always deprived of the faculty of language—sometimes they can pronounce a few words without any appreciation of what they mean. The cranium is larger than that of the first variety, and may be 140–145 millimeters in length, and may have a circumference of 420–425 millimeters, and a capacity of from 600–700 cubic centimeters.

The greater number of microcephalous idiots are of the first variety (dwarfs) and rarely grow taller than a boy of eight years (Broca). Many always remain undeveloped; others are taught to talk, and but few advance beyond the mental status of a child of two years. The antero-posterior diameter of the skull may be no more than over 10 to 13 centimeters, the horizontal circumference may be from 32–37 centimeters, and the capacity is always below 600, and may be no more than 300 cubic centimeters. Other idiotic heads are referred to by Broca—the demi-microcephale. The *scaphocephalous* deformity consists of an exaggeration of the vertical and longitudinal diameters; the *plagiocephalous* or oblique-oval deformity, which depends upon premature obliteration of one of the branches of the coronal suture, and of the lambdoidal suture. In the *platycephalous* deformity the sinciput is flattened and the vertical diameter is diminished. In the *acrocephalous* head, on the

contrary the sinciput is conical, and there is an increase in the vertical diameter (Broca). Various other uncommon deformities are the result of premature closure of other sutures.

The association of atypical cranial with various bodily deformities should suggest idiocy rather than imbecility. This is true especially in regard to the condition of the mouth. The teeth of the idiot are apt to be irregular, double, or connected with some imperfection of the hard palate, such as vaulting or fissure; or the alveolar process may be projecting.

The features of the idiot are coarse and his mouth is large. His vision is defective and he is apt to suffer from disease not only of the eyeball itself, but its muscles as well, so that there may be atrophy of the disk, cataract, or strabismus, and there is an inability to fix the eye upon small objects. The hair upon the body of the idiot is sometimes coarse and plentiful, or on the other hand is unusually fine and silky, though this latter condition of affairs is, I think, more marked in imbecility. Idiots are slow and awkward in their movements, disinclined to work, and the muscular system is weak. Cutaneous sensibility may be either elevated or depressed; in the latter case there is tolerance of external disagreeable irritation—flies crawling on the skin or the bite of insects produce little discomfort. The gait of the idiot is often waddling and unsteady, and his grasp weak. His habits are untidy and sometimes disgusting. He gorges himself with whatever may be placed before him, and often carries in his mouth a bolus of food for hours at a time. He voids his urine and feces wherever he may be, and very often indulges in masturbation and objectionable amusements of a vile character.

Idiocy is due much more often to the intemperance of the progenitors than to any other cause. Of 359 idiots seen by Dr. Howe, it was found that in 99 cases the parents were confirmed drunkards. Consanguineous marriages are believed by Maudsley to lead more often than is generally supposed to degeneracy which is manifested in succeeding generations by idiocy. How much syphilis predisposes to this condition it is difficult to say. The longevity of idiots is short and they rarely live beyond the age of thirty.

Cretinism.—A rare form of idiocy is known as *Cretinism*, which was formerly supposed to be purely of limited endemic origin, but such is not the case. The skin is infiltrated with a mucoid substance giving the person a distorted, bloated appearance. The thyroid gland is either enlarged or entirely

absent, the mouth is large, and the hands and fingers misshapen and "clubbed." The eyes are squinting, the complexion pale and sallow, and the speech is thick or muffled. There is usually sluggishness of movement and lowered surface temperature. The mental condition is allied to that of idiocy.

Imbecility is distinguished from idiocy in the fact that it is due to disease of the brain commencing usually shortly after birth, that unlike idiocy, the bodily defects are asymmetrical and the intellectual imperfections are rather different, the mind of the imbecile being insusceptible to training except to a limited degree.

The power of speech is not absent, so often as it is in the idiot, and when speech disturbances exist they are usually aphasic or ataxic.

The mental characteristics of the imbecile are manifested in low mischievous cunning, bad temper, silliness and stupidity. The condition is accompanied by epilepsy or paralysis. I do not agree with Browne, who says that it is impossible to make a distinction between idiocy and imbecility. There is in most imbeciles some indication of the existence of mind, though its manifestations are weak and distorted and almost blotted out.

Weak-Mindedness.—The degrees of imbecility vary greatly, and at one end of the line we find the person of weak mind, while successively we find the vicious imbecile, "the fool," the eccentric individual whose eccentricity is diseased ; and various other representations, until we reach the other end to find the subject whose mental state is so low that he resembles the idiot in the paucity of his intellect.

Congenital Viciousness.—Ogston speaks of another class of persons who are undoubtedly imbecile.

"Short of this," he says, "we have a class of beings in whom the mental deficiency is less apparent and less easily proved to exist, and who are considered by medical authorities to be irresponsible, though they frequently become objects of punishment before the criminal tribunals. They are mostly found amongst the lower classes of society, are capable of some easy occupations, are looked upon as simpletons, and often as such subjected to much annoyance. They are often lazy and drunken, are dextrous in thieving and are thought to be very cunning. They are sometimes violent and passionate, committing homicide or arson upon the least provocation. These, too, have strong sexual propensities, are easily betrayed into

outrages on modesty. In such cases, though the medical man may not discern that the individual is insane, he may perceive that he is not quite right in his mind, for in most of these cases there is something about the individual which makes him unlike the generality of other people. There seems in all such persons some want of intellect. They do not appear to possess the same composure of mind as common people. They have a great look of cunning, or of vacancy or unsettledness. They will speak rationally and with consideration, but not with ordinary energy or depth of reflection, and consequently their judgment appears to be impaired." Many people of this class have been sentenced to punishment, sometimes unjustly, perhaps, but great care is necessary in pronouncing upon the responsibility of one of this kind. The nature of the crime itself, and its motiveless or wanton character should be considered in connection with the mental condition of the person, and every care should be taken, for society needs protection as well as the criminal.

Many so-called cases of moral insanity are built upon the foundation of congenital viciousness.

Dementia.—*Dementia* is a term used to define the condition manifested by a decay of the mental powers. It is always attended by an enfeeblement of intellect, and in the latter stages there is a blotting out of every thing like intelligence. We may consider it as a state commencing in early life as the result of shock or disease; a consequence of acute insanity—a result of coarse cerebral disease or injury (commonly vascular plugging such as embolism) or cerebral occlusion from vascular disease; or as a senile condition connected with extensive and general arterial degeneration. The most striking symptom of dementia is the weakness of memory, which deepens so that the individual is practically shut out from the past and cannot remember what he has heard, or what he has done a few minutes before. In cases of mania or melancholia the loss of memory marks the transition into dementia. Dementia is always characterized by an extreme weakness of mental action which gives his expression a feebleness which is manifested in wavering play of worn out emotions, incoherence and half-formed and varying delusions. His excitement is fitful and like the sputter of an expiring candle flame, or the combustion of a dampened squib. He is ill at rest, cannot concentrate his mind upon the subject of the present and cannot connect his thoughts, and it is im-

possible for him to clearly recognize the relation of an idea with others that have preceded it. As Browne says: "Familiar objects are not recognized; places in which he has resided are mistaken for other places; times are forgotten; the future is not, the present is a haze, the past is dim. He cannot keep these shades separate from one another. He confounds the past of to-day with the past of yesterday."

The delusions most characteristic of dementia are those of suspicion. A dement before his mental condition reaches the last stage is distrustful, doubting and full of fears. He may believe he is beaten or maltreated, but his delusions are rarely elaborate; unlike the melancholiac he cannot go through with the details of a gigantic conspiracy, for this would require much greater mental strength. His hallucinations are common, and they are of the simplest kind, and usually so unreasonable as to attract the attention of the lay observer. In this respect they resemble to some extent those of acute alcoholism, except there is little of the personality of the latter.

The incoherence of dementia differs from that of mania in the fact that in the former there is a paucity of ideas and the patient becomes demoralized in his attempt to associate and connect them. In mania the loquaciousness and incoherence arise from the excitement and liveliness of mental action—the ideas are formed much more rapidly than they can be expressed.

The dement shows his condition in the vacancy of facial expression the lack-lusterless eyes which are often suffused with tears, and commonly he exerts himself but little.

Secondary Dementia follows organic diseases of the brain—which may be slow in appearance. Such mental enfeeblement may anticipate the conspicuous nervous lesion, the cerebral hemorrhage, thrombosis or embolism and be manifested by loss of memory, irritability or aphasia, or it may follow the accidents I have mentioned. In the first case the arterial degeneration is slow and the mental defects are sometimes unnoticed. A case in which the question of testamentary capacity was considered lately came under my notice, the patient being an old man who first manifested mental symptoms a week before an attack of hemiplegia. Upon the day his mental disturbance became conspicuous he made many blunders in his business, such as paying his employees more than their wages, and not knowing his mistakes until reminded; making an important engagement in the morning and not knowing any thing about it in the afternoon, as well as a series of trifling neglects of various kinds. A week later he had an attack of hemiplegia, followed

by two others and died in a month. His mind gradually became weaker and weaker, his memory more feeble, and he died in a condition of coma.

Other cases are less rapid and their course is marked by a gradual exhibition of mental weakness which goes hand in hand with physical decay. The dementia of syphilis is an example of this kind—the stupidity, however, being more marked than in other varieties. The syphilitic dement is apt to present in addition to the loss of memory, which is quite marked, and a tendency to somnolency, various symptoms indicative of organic changes. Localized cranial nerve paralysis, optic neuritis and convulsions are among them, or it sometimes happens that a rapidly developing dementia complicated at some period by delusions of grandeur is presented, which at the early stage may resemble general paresis. The mental enfeeblement is earlier, however, than in the latter disease, and more marked.

When dementia succeeds primary forms of insanity such as a mania or melancholia it is *secondary* or *consecutive*. Mania runs much more frequently into dementia than does melancholia.

Bucknill and Tuke divide dementia into three forms, "*Partial* or *incipient*," and "*complete* or *confirmed*," and an intermediate form.

"1st. Those who, whether previously well or insane, are gradually passing into a decidedly demented condition. Some confusion of thought, a perplexed rather than stupid expression, and a failing memory, are the most obvious symptoms. Such patients are not incoherent, or are only occasionally so. They are sometimes conscious of their condition, and carefully avoid committing themselves. They can read and write, but in regard to the latter it will be found that after composing a few sentences correctly, they express themselves confusedly and spell incorrectly. This is *partial or incipient Dementia.*

"2d. Those who are so far advanced that they cannot tell their names.—Many of this class are dirty in their habits. Their time is mostly spent in listlessness or muttering to themselves, twirling their fingers about in all directions, now catching up something from the ground with which they play until some fresh fancy seizes them, or scraping together bits of paper, sticks, strings, stones, etc.; not with the constructive power of the child, but purposelessly; or if otherwise, only with the mischievous propensity of the magpie. We then have *complete or confirmed Dementia.*"

Senile Dementia is usually attended by physical debility as

well as mental failure which conspicuously betrays itself by impairment of the memory and childishness. The senile dement is apt to repeat himself, as the same worn-out story is told over and over again, while petty incidents of former life are constantly gone over, and in advanced stages the individual is unable to recollect what he has said a few minutes before, and is incoherent, and silly. He may perhaps be unable to remember the names of two children, but mixes them up. He is ill tempered and petulant. There is a pitiful lack of concentration which results in restlessness of mind and body. Sleep is broken and in consequence he wanders about the house at night, or out into the street in an aimless way, where his peculiar behavior may lead perhaps to his arrest. Incontinence of urine causes him to wet his clothing frequently and he gives off an ammoniacal odor. The old man undergoes a moral change as well as an intellectual, and he is amatory, obscene, and fond of telling of the adventures of his youth, and living over again its gallant frivolities. His leer is lascivious, and he goes about with unbuttoned clothing, and is lost to all shame. He is extravagant and prodigal, and buys useless things despite the remonstrances of his friends.

The subjects of the disease are often elderly men who have suddenly freed themselves from the cares of business. The reaction which idleness entails intensifies the tendency to mental enfeeblement and perversity.

The demented old man sinks into a condition of vegetative life. The mental vacuity and helplessness is painful, and he gradually sinks and dies finally of exhaustion. It is occasionally found that just before death there may be a slight evidence of intelligence, but this is by no means common.

Melancholia.—*Melancholia* is an asthenic variety of insanity of easy recognition and of variable form, and is much more common among women than men. It may be acute or chronic, and according to its grade has received a variety of names. The French writers describe *lypemanie* which corresponds more closely to the simple melancholia of English writers, and a severer form which is designated *stupidité*, which has its analogue in melancholia attonita. Still further subdivisions are made with reference to the predominance of religious, erotic, hypochondriacal or other prominent characteristics. Melancholia is characterized by a state of despondency and may be defined as "a mental affection manifested by delirious ideas

of a sad nature and by a depression that may amount to stupor (Lutaud)."

The depression may be of a passive nature, with mental and physical relaxation, and with utter dejection and hopelessness, or there may be a more forcible expression of mental suffering, with anxiety, despair, and muscular rigidity and some excitement. As in mania there may be a great variety of insane hallucinations and delusions expressed by the patient, but these are mostly of an erotic or religious character, and there is in nearly every case a history of persecution. There is in the beginning after a prodromal stage of bad health a change in the patient's habits and disposition. A naturally happy and joyous person becomes sad, reserved, and takes little interest in her surroundings. There may be an oversensitiveness and a sense of personal shortcomings, and a feeling of self-depreciation ; the patient is tortured by doubts regarding her religious views and her fitness for association with others. She may imagine that she has committed some unpardonable sin, or that she is beyond help. She will not go to the communion table, believing her presence there will pollute those whom she may meet, and one who has led a blameless and pure life may consider herself the lowest of women. In other cases the depression exists in regard to more worldly things. The merchant will believe that he is bankrupt, that he is dishonest, or that he is the special object of contempt among his business associates. Very often melancholia arises from a belief that the individual is in a hopeless state of bodily disease, and this form of trouble may follow simple hypochondriasis. Delusions of persecution are exceedingly common, and in fact I know of no well marked case where they have not existed at some time or other. Under the influence of hallucinations or delusions the melancholic patient may and often does resort to suicidal and homicidal violence, but more often the former, and such demonstrations are as a rule unlooked for. Under the sway of delusions of persecution the melancholiac may attack imaginary enemies and at this stage of the disease should be carefully watched, for these acts are commonly impulsive, and though in the beginning she may describe her feelings and promptings and no attention may be paid to them, she may to the astonishment of all commit some horrible crime.

The disease rarely exists in an uncomplicated form, but is associated with excitement and may alternate with attacks of mania. Dickson very properly suggests that we should be very careful in our investigation of these cases, as they may be the

basis of subsequent legal complications. The melancholic patient pays very little attention to her bodily wants, if the disease be at all well marked. May refuse food, either as the result of a delusion perhaps that she is being poisoned or that she can live without it, or on the other hand from entire disregard of life and its duties, and it may be necessary to use forcible measures to compel her to take nourishment. She becomes dirty in her habits, soiling her clothes and paying little attention to the appearance she presents. With disordered hair and averted eyes the melancholiac sits by herself lost in her own reflections, although there are some who are communicative and loquacious. Physically the patient reflects her mental disturbance and in the facial expression which is almost too familiar to need description. As a rule the physiognomy is of a simple kind. The face is pinched and wan and unnaturally pale, the eyelids droop, and the facial folds are dependent ; the lips are bloodless, the pupils are dilated and every thing indicates inaction. The hands are livid and hang idly, and the maintainence of a fixed position sometimes for hours at a time is characteristic of the intellectual torpor. The subject of anxious melancholia is restless, the manner may be excited and full of energy, and she betrays in her facial expression the mental suffering incident to her torturing doubts and fears.

Simple Melancholia.—In medico-legal cases we are often called upon to distinguish between simple melancholia without delusions and the more serious forms where there is much beside the depression. In the latter, volitional control is often interfered with or lost, and this may arise from the false belief in persecution, or some other such indication of intellectual perversion. If crimes are committed as the result of simple melancholia, suicide seems to be the most common, and this may be due to utter dejection and hopelessness, and an unwarranted belief that there can be no change for the better. In such cases the most ordinary physical disturbance is exaggerated into a incurable malady, and hypochondriasis is a complicated condition.

Mania.—*Mania* is a form of mental disease accompanied by more or less excitement and is *acute* or *chronic*. Most authors divide it into general, intellectual, and moral, and moral mania is again divided into general and partial. The two important divisions however are *acute* and *chronic*, and the other terms are only convenient as fixing predominant features of an attack of active insanity.

Mania begins by changes in the patient's habits and disposition, and may at first be poorly marked, but afterwards manifests itself in attacks of violence. The acute maniac is in a constant state of restless activity which is expressed in sudden and rapid muscular movements, and he undergoes great fatigue without complaint. The eyes are bright and injected, the face flushed, the hair bristling, the temperature heightened, and the pulse smaller and rapid. The urine is scanty and loaded with urates, and the tongue is glazed and red. Such a patient is violent, destructive, and tears his clothing, or breaks articles of furniture. He eats ravenously and is apt to help himself not only from his own plate, but from the dishes upon the table. He is voluble and usually incoherent and emotionally excited. In some cases of mania as well as melancholia the derangement seems to be almost confined to the intellectual faculties and it is this fact that has led to the adoption of the term Intellectual Insanity. Ray and others believing that derangement may be limited to one or more faculties, speak of partial moral mania or *monomania.* Mania and melancholia are symptomatic conditions after all, and may exist not only by themselves but as secondary or intercurrent complications of coarse brain disease or even imbecility or idiocy. (Ogston). This irregularity and inconsistency in the expression of insane symptoms have led to the greatest difference of opinion. It should be borne in mind, however, that an ordinary case of mania at different stages may be designated not only as "monomania," but "partial" or "moral" insanity by those who look upon the case superficially. The morbid moral changes are displayed in perversion of natural feelings, appetites, habits and impulses. These may be prominent, and for a time disconnected from any *marked* hallucination or delusion.* Then mania is manifested by certain forms of moral perversion and we apply a variety of terms.

Kleptomania.—*Kleptomania* for instance enters into the history of certain cases of insanity, and consists of a propensity for theft. In itself I do not think we are justified in considering this necessarily as insanity. It is only when useless gew-gaws and trifles are stolen, that the matter should be looked upon seriously. When the theft is connected with secretiveness there is usually something wrong. I can recall the case of a well-to-do lady who appropriated a great number of trifles such as children's small china dolls, pencils, bits of worsted, and a variety of small objects which she filched from the shops she visited. When her insanity assumed a well

*(See Appendix B, Primary Delusional Insanity.)

marked form and she was less careful, these objects were found wrapped up in bits of rag and paper, and stowed away in all sorts of out of the way places in magpie fashion. Kleptomania has been spoken of as a consequence of disordered menstruation, as a phase of idiocy, as a feature of the so-called lucid interval, and as of occurrence in mania. It is not safe in courts of law to testify positively as to the insane character of certain thefts, without we find there have been some other manifestations, for the morbid propensity to steal cannot be looked upon as an isolated symptom.

Pyromania.—*Pyromania* or the mania for burning is another form of moral perversion occurring in connection with mania. I have found it to be a feature of certain varieties of epileptic insanity occurring with mental weakness. There is a boy at the Hospital for epileptics and paralytics who has repeatedly attempted to set fire to the wooden pavilion where he and his fellow patients are kept. Under the influence of delusions we sometimes find that mothers will attempt to burn their children by setting fire to their clothing, or will commit destructive acts with fire as the result of various promptings.

A well known instance of pyromania to be found in the books is that of Martin who attempted to set fire to York Cathedral.

It is rare for this tendency to be found alone and it is usually connected with suicidal and homicidal impulses, and fire is used for the destruction of the patient or his victim.

An interesting American case* in which pyromania was urged as the defense, was that of Speir, who set fire to the Utica asylum. He had been committed to the asylum upon the order of a judge, but discharged subsequently, it having been doubtful whether he had ever been really insane. After his discharge, it was found that the several acts of arson committed were the result of personal pique and although of a vicious turn he was not insane.

A case of a different kind is that of Nathaniel Greemont, of Danbury, Connecticut,† a young man of previous good character who attempted to burn the whole village, but when he had destroyed two barns was arrested after confession of his crime. He claimed to have an accomplice, but this was subsequently shown to be a delusion. It was shown that he was an epileptic

**American Journal of Insanity*, Vol. xv., No. ii, p. 200.

†Ibid Vol. v., No. iii, p. 237.

and that he presented physical peculiarities, his head being unusually small, in fact he presented the indication of epileptic insanity. Throughout the trial he manifested great unconcern. He was discharged the jury failing to agree upon a verdict.

"A young girl of less than fifteen, named Grabowska, afflicted with nostalgia, twice set fire to the house, in order to quit her masters. She declared that from the moment she entered their service she was unceasingly possessed with the desire to burn the place. It seemed to her that a specter continually before her impelled her to the act. It was noticed that this girl for a long time suffered from violent headache and that menstruation was behindhand."*

Dipsomania has been applied to the form of insanity which is manifested by a craving for alcohol. In cases of this kind the question whether the inordinate appetite for drink is a result or a cause of the insanity is to be determined, and one of the most important and common questions that arise, especially in criminal trials, is whether a specific act is the result of intoxication or whether it is a genuine insane delusion. In a subsequent chapter I will discuss the medico-legal relations of alcoholism, and it only remains here to call attention to a sudden change of habit which occurs in people who before were temperate and useful members of society. It sometimes happens that an individual who has borne an irreproachable character, the head of a family or a church, will suddenly *with other changes* develop an inordinate craze for liquor. He will plunge into violent excesses which will last for a time, and then he may suddenly cease his orgies and for a considerable period lead a blameless life until the next period when he repeats his excesses. Forms of sudden moral change with mania or melancholia are always grave and should be looked into.

When the *dipsomaniac* drinks he does so without any consideration of conviviality ; he does not care for liquor during the remission of his disease, and will not take it if placed before him or offered to him.

The female dipsomaniac is more apt to crave drink during her menstrual periods, and the appetite may suddenly disappear after the cessation of the particular period. When the condition occurs after sunstroke or injuries to the head the diagnosis from ordinary drunkenness may be made out.

Suicidal Mania is one of the most common forms of

* Forbes Winslow's *Journal of Psychological Journal*, Vol. xiv.

mental derangement in which the moral change is marked. The existence of a dominant depressing delusion may constantly suggest insanity, or there may be nothing of the kind, there being only a constant impulse to commit suicide for no reason whatever. In some of these cases the intellectual aberration may be very slight, and no indication of the patient's real state of feeling is manifested. A man apparently in the full possession of his faculties may blow out his brains or jump into the river, and those left behind are filled with wonderment and unable to account for the motive. Some of the individuals whose impulse is not strong enough to lead them to extreme measures are able, upon recovery, to refer to the period when they purposely avoided all agents with which they might make away with themselves, and have spoken of their terrible temptations.

Forbes Winslow and others have referred to numerous cases where the delusion has been that it was necessary to make some such sacrifice to gain admission to heaven, or an insane hallucination has been the basis of the mental state leading to the suicide.

The question of suicide is often considered in relation to life insurance policies. It cannot be denied that a perfectly sane man may destroy himself for what he really believes to be a holy end, the prevention of suffering or to avert an impending calamity that will ruin his family, just as a soldier goes into battle from patriotic motives, or a miner or sailor gives up his life in a "forlorn hope." It is well therefore to distinguish whether the insured man is insane when he makes away with himself or whether he dies by his own hands, that his family shall receive the amount of his life insurance policy. The method of suicide should be considered, his relation with his family, change in his habits and way of business. Hereditary taint is an important question, and Bucknill and Tuke refer to the fact that many interesting cases are on record showing the inherited tendency.

Falrét reports the case of a young woman who became melancholic from the knowledge that an uncle had committed suicide by his own hands, and under the delusion that her blood was corrupted attempted the act of self-destruction. Winslow refers to a case of the same kind: A few months ago I was called to see a young lady whose two uncles had taken their lives and whose father had made a similar attempt. She knew nothing of all this, yet when laboring under melancholia made desperate and repeated attempts to kill herself, and upon one

occasion was found with her throat bared and a number of knives and razors before her.

The sexual phase of insanity should always receive attention while it occurs in connection with other phases of mental disease or as a symptom of hysteria, and the commission of an unnatural crime should always suggest a careful examination of the patient's antecedents and present condition.

Nymphomania and Satyriasis, the first being a disease of females, the latter of males, are symptomatic conditions and are connected with emotional excitement rather than intellectual disturbance.

Homicidal Mania, which may occur in the course of any form of insanity is sometimes a predominant feature of this particular mental derangement, and is often concealed or masked. For this reason many horrible crimes have been committed by persons who had not been suspected of any thing but slight derangement which did not call for their confinement, or sometimes were not believed to be insane at all. The recent case of Dobourque, the insane Frenchman, who rushed through a crowded street stabbing right and left with a pair of steel dividers, is a startling example. He had been regarded only as a person of eccentric habits, harmless for years, and wandered about without restraint; just as most of these cases are, he was seized with an impulse which led to the death of two or more of the many unsuspecting women he struck.

I am not disposed to grant that in such cases this is simply a perversion of the moral faculties while the intellectual are in a normal condition. In the majority of cases the development of the murderous tendency, and the intellectual derangement is slow, and not the flash from a clear sky. A long course of symptoms indicative of cerebral disturbance, are displayed in various little changes in temper, and in the fact the subjects are persons, (usually women) who are or have been hysterical, hypochondriacal, or unbalanced so far as their emotions are concerned. Epileptics are very apt to have such impulses and Ogston refers to its origin as the result often of a peculiar condition connected with pubescence in many people of bad temper with poor digestion. In a case of hysterical insanity I recently committed no one supposed the young girl to be more than engaged with her own ailments, and it was hinted that her incarceration was a great wrong. She was found a few days before leaving home to have a rope concealed beneath her

night dress, and she several times alluded to the possibility of the nurse to whom she was devotedly attached, being found dead in the morning. "How strange it would be," said she to her attendant, "if you were choked to death during the night and found dead in your bed in the morning." When she parted with this woman at the asylum she buried her fingers in her throat, meanwhile kissing her affectionately. Such morbid impulses are characteristic of these forms of irregular mental trouble.

Persistence of Suicidal Attempts.—The persistence in the suicidal attempt is sometimes remarkable. I have lately seen a woman whose insanity was of an hysterical character and her jealousy of her husband was something remarkable. Not only did she for years dog and follow him about, but she would not allow him out of her sight except in company of two of their children. She insisted upon sewing up his underclothing with many colored silks, so that he should be prevented from opening them and prove unfaithful to her without being detected. The development of mania with moral perversion was marked, she was excited, cursed, and used obscene language, and finally became suicidal. Three separate attempts were made in one day—at one time she rushed to the window and tried to throw herself out; the second attempt was made to sever her wrist with a knife, which was too dull,; however; in the third she placed her head in an open grate and was severely burned. She could assign no motive for the act.

Homicide as the Result of Hallucination.—Homicidal mania may lead to the commission of an act of violence as a direct result of hallucination or insane delusions, such hallucinations or delusions being either a primary element in the suggestion of the act, or a result of the diseased propensity. Bucknill and Tuke direct especial attention to the fact that the morbid moral tendency is as important in coloring the hallucination as the actual intellectual suggestion. In other words a person may kill another because he delusively believes that the other intends his destruction, or he may kill him simply because his morbid propensities impel him to kill some one for no reason whatever except it perhaps may be the pleasure of seeing blood, or executing his fell purpose. A case of the latter kind is that of Jesse Pomeroy, the Massachusetts boy-murderer, who tortured and murdered small children for the simple gratification it gave him.

Homicidal Mania with or without Delusions.—That there is an underlying intellectual perversion even in these cases I have no reason to doubt. For convenience we may classify homicidal insanity as follows :

1. Cases in which the act is the result of an insane delusion.

2. Cases in which the act is apparently purposeless (so-called moral insanity) and in which there is usually some emotional excitement.

Bucknill and Tuke in an analysis of cases present 50 examples. These are divided into :

I. Without marked disorder of the intellect :

(*a*) Without premeditation or design,	31	
(*b*) With premeditation or design,	4	
	—	35

II. Cases in which there was more or less disorder of the intellect :

(*a*) With deficiency of intellect,	5	
(*b*) With delusions, etc.	10	
	—	15
Total,		50

It would appear from this table that the prominence of general intellectual disorder was not great, for the majority of cases are of the impulsive variety—but these statistics refer only to the nature of the act which may have been committed at a stage when the presence of delusion or intellectual disturbance was not pronounced.

Premeditation.—The insane often show great ingenuity in the execution of their crimes. They are able to scheme and plot and exercise an amount of reasoning power which usually, however, arises from false *premises* and eventuates in the commission of an act which in no way helps the patient, and which he would never do in health.

"A man aged 32, a laborer of no education, no religious belief, of bad habits, became the subject of chronic mania following prolonged ill-health ; killed the adopted son of his brother-in-law by repeated stabs with a pitch-fork and knife. The murder was premeditated, well-arranged plans of concealment were laid and carried out, the instruments were carefully washed, and the body buried under the barn. His motives were grounded in personal hatred and revenge. He had always borne the reputation of being a bad man. The act was committed in the daytime. Demented, and after nineteen years was removed to the County Asylum."

In this case there is just enough to create a doubt of his insanity in the lay mind. The common idea that lunatics cannot reason, and the prisoner's previous bad character and revengful motives were against him, but the subsequent termination of his disease gives the case a different light. Many lunatics commit acts, however, for which they are entirely responsible, and while insane in other ways are perfectly capable of knowing the difference between right and wrong, and Winslow refers to a confirmed chronic maniac who was overheard to say: "If I were to set fire to the asylum they would not punish me for it, for I am insane."

Cunning of the Insane.—A patient of my own had been the subject of melancholy for some time, but no one suspected any dangerous form of insanity. She managed, however, to coax her sister into her room, and when there turned the key and sprang upon her and would have killed her had help not come. Dr. Gray had under his care "an educated woman and mother of a large family. Was of an amiable and gentle disposition, but sank into melancholia at the climacteric period. There was a strong hereditary taint in her family. One night she requested to sleep at the front of the bed, which was permitted. On retiring, she drew a small stand to the bedside, and when she supposed her husband asleep, cautiously took a razor, which she had concealed in a drawer of the stand, and drew it across his throat. He, however, had not been asleep, and resisted; she then cut her own throat; she never spoke afterward, but continued very suicidal to the day of her death, which occurred about six months after."

I mention these cases to show how lay witnesses may be deceived, and how easy it is for a person to derive a wrong idea of a really serious case and perhaps so testify.

The persistence of certain lunatics in their homicidal attempts even when every precaution is taken, is well illustrated in the following case reported by Gray: "Man, aged 27, German, member of Lutheran church, of good education, a musician by profession; was married to a lady of great personal beauty, his superior physically, and to whom he had been long and tenderly attached. Some months after marriage he made an attempt to push her into the canal, and also into the river. After several attempts of this kind, she demanded his reasons for such strange conduct; he burst at once into a paroxysm of weeping, mingled with the fondest expressions of endearment, and an obscure reference to the bliss of heaven. She concluded that he was be-

coming insane, and that, under some delusion, he desired to kill her, and afterwards take his own life ; wishing to avoid the shame and despair of such an exposure, she courageously determined to keep the secret, and rely upon her own strength and presence of mind to prevent the accomplishment of his purpose. He was paler than usual, and suffered from headache, but was able to discharge his accustomed duties. He continued his attempts, his wife searching him every night, often finding a brace of pistols, a razor, a carving-knife, then locking the door and securing the key. It occurred to her that traveling might benefit him, and they accordingly started to visit some friends at the West. On board the steamboat, crossing Lake Erie, he was most persistent in his efforts to induce her to walk with him on the upper deck, and did not cease begging to have her do so until midnight, and then cried himself to sleep. Having nothing to do, his attempts only increased in frequency. They retired one night, after a most careful search, as usual; when about half asleep she was aroused by feeling the edge of a razor drawn across her throat. By combining great presence of mind with all the strength she could summon, she escaped with an extensive but fortunately superficial wound ; and to use her own language, 'thinking it about time,' she brought him to the Asylum. There, one of his first acts was to conceal a razor. His disease was dementia. He soon recovered, and subsequently acknowledged that his sole and engrossing aim was to kill his wife, and then himself, to secure the mutual enjoyment of heavenly bliss ; thinking, as he expressed it with eyes dancing with delight, 'if we were so happy, happy here, what would it be in heaven !' His object in concealing the razor was to cut his wife's throat the first time she should be permitted to visit him, and then his own."

Cases of homicidal insanity are mentioned, in which the motive given by the murderer is that the victim is to be spared future torment and misery. In one case mentioned by Winslow—that of Sarah Grant, who murdered her boy by cutting off his head with a bill-hook and almost killed two others in the same way,—the prisoner, when arrested, confessed that she had done the deed because she believed that all her children were going to hell. In this case, as in many others, there is a suicidal tendency upon the part of the patient. I have known of several such cases and in each case the horrible nature of the act is increased by the fact that its execution is accomplished in the most cold-blooded and brutal manner.

Gray reports the following cases, which are of a common type :

"Woman, aged 46, married, five children, temperate. Had attack of melancholia, with depressing delusions. Said her children would all get sick and die, and that all would die together within twenty-four hours. Soon after this seized one of her children, a daughter, and attempted to cut her throat, was prevented by others. Afterward she tried to dash her own brains out against a stone wall. She had an appreciation of her condition and gave her own history. She was discharged after about nine months, in an improved condition."

"Woman, aged 35, married, temperate. Had suffered from melancholia for more than a year and was very much depressed, said she was tired of life and did not wish to leave her boy behind her. She attempted to kill him by cutting his throat, wound severe but not dangerous, then tried to cut her own throat, but desisted before she inflicted severe wounds. Within a month was brought to the Asylum, where she recognized her condition and said that at the time she was insane. She was thin and anemic, but regained her health, and in a few months was discharged recovered."

Reasoning Homicidal Insanity.—The reasoning power of the insane is sometimes remarkable. The following case is one in which a woman attempted a homicide after a process of ratiocination having for its basis a delusion, and her motive being the desire to prove the truth of her original delusion :—

"A woman about thirty-six years of age, who had been well-educated, but whose conduct had not been exempt from some irregularities in consequence of intemperance and manifold disappointments, became affected with madness.

"She was by turns furious and melancholic, and conceived she had murdered one of her children, for which she ought to suffer death. She detailed the manner in which she had destroyed the child and the motives which actuated her so circumstantially and with so much plausibility and feeling, that if it had not been known that her child was living, the physician under whose care she was placed might have been deceived. By her own hands she had repeatedly endeavored to terminate her existence, but was prevented by constant vigilance and due restraint. Her disposition to suicide was afterwards relinquished, but she still insisted that for the murder of the child she ought to suffer death and requested to be sent to Newgate in order to be tried and undergo the sentence of the law ; indeed, she appeared to derive consolation from the hope of becoming a public example and expiating her supposed crime on the

scaffold. While in this state, and with a hope of convincing her of its safety, the child was brought to visit her. When she beheld it there was a temporary burst of maternal affection; she kissed it and for a few moments appeared to be delighted. But a look of suspicion quickly succeeded, and this was followed by a frown of indignation, which rendered the removal of the child a measure of wholesome necessity. Perhaps in no instance was the buoyancy of madness more conspicuous over reason, recollection, and feeling. She insisted they had attempted to impose on her a strange child, which bore a faint resemblance to her own; however, by such subterfuges she was not to be deceived; she had strangled the child until life had totally departed, and it was not in the order of nature that it should exist again. The effect of this interview was an exasperation of her disorder; she became more cunning and malignant, and her desire for an ignominious death was augmented. To render this more certain and accelerate her projected happiness, she enticed into her apartment a young female patient, to whom she appeared to be attached, and having previously plaited some threads of her bed-quilt into a cord, she fixed it round the neck of the young woman and proceeded to strangle her. Fortunately some person entered the room and unloosed the cord in time to save her. When this unhappy maniac was questioned concerning the motive which induced her to attempt the destruction of a person for whom she had manifested kindness, she very calmly replied that as the murder of her own child was disbelieved she wished to exhibit a convincing proof of the ferocity of her nature, that she might instantly be conveyed to Newgate and hanged, which she desired as the greatest blessing. With considerable satisfaction we may add that in a few months, notwithstanding her derangement had been of three years' duration, this woman perfectly recovered, and for a considerable time performed the duties of an important and respectable office."

Homicide Through Insane Inspiration.—The instances when the individual commits a crime under the influence of an *insane* inspiration are numerous. Dr. Gray reports the case of a "man, aged 65, married, two children, farmer, temperate; was a case of periodic mania, and had suffered from several previous attacks. Had been insane a month prior to admission, was talkative, incoherent and exalted in his delusions. Attempted to kill his son with an ax and a pitchfork, under the delusion that he had received a divine commission to perform

the act. Son was wounded in the head. He continued in the Asylum for some eight years, when he died suddenly, from heart disease."

A second case is that of a "man, aged 31, married, two children, cabinet maker, temperate. After becoming insane he talked much upon the subject of spiritualism, developed delusion that he was the medium of Jesus Christ, that he was filled with the Holy Ghost, said there were five persons in the town whom he was authorized to kill and bury, that he might afterward raise them from the dead and make them better. A few nights before he was sent to the Asylum, after retiring, got up, told his wife he was going to get a hammer with which to kill her, as one of the five persons. She escaped from the window to a neighboring house, whence he followed her in a state of great excitement, but was secured before inflicting any injury. He remained in the Asylum, some eight months in a maniacal condition. Was noisy, destructive and violent, and in this state broke out during the night and escaped."

Distinction Between Acute and Chronic Mania.—Acute mania is distinguished from chronic mania by the incoherence of ideas, by the excitement and violence. In the confirmed disease the delirium is not so continuous.

Circular Insanity.—*Folie circulaire* (*or folie à double form*) is a form of insanity characterized by alternating attacks of mania and melancholia. It is most common among women, and the prognosis is bad. It is to be recognized in the succession of attacks separated by periods of comparative freedom from mental disturbance. The melancholia is variable in intensity and is attended by great debility and emaciation. The patients are irresolute, emotional and present delusions. The mania is apt to be of a low grade and it may simply be a form of excitement of a mild kind. (See Appendix C.)

Delirium as distinguished from Mania.—The *delirium* of fever is often confounded with maniacal excitement. Besides the history of the particular disease we find that the mental excitement of delirium is disorderly and chaotic in the extreme. There is a rapid succession of expression in which there is no consecutive character. "Memories are confounded with perception, and are often more real than sensory impressions." Reasoning power is lost. In mania the reverse is the case for the individual reasons, though falsely; and there are times when the mental disturbance wanes and is broken by

interruptions when the patient is more cognizant of his surroundings. The age of the person and the association of physical prostration are inseparable from delirium—we find no such marked functional disturbance in mania—the departure from ordinary bodily health being comparatively slight.

Crimes of the Puerperal Insane.—A form of mania follows delivery in from a few days to a month or more, and occurs most frequently before the lochia are stopped. It is usually attended with the appearance of albumen in the urine, with interruption or suppression of the secretion of milk, or the subsequent stoppage of the lochial discharge. The patient may either in the beginning be melancholiac or, on the other hand, loquacious, laughing, and foul in her talk. She then has delusions of a religious character, or believes she is persecuted; and there is incoherence perhaps if the excitement be sufficiently acute. She seems to have a loss of memory of recent events, may or may not correctly recognize persons about her, but most frequently does, and she seems to pay very little attention and evidently does not care much for her baby. During a period of acute delirium, or more often at times when there is an apparent lull in her mental condition and when it is supposed that she is getting better, she may, when carelessly left to herself, strangle or make away with her offspring. Puerperal mania is often of such a masked character that the homicidal acts are simply incredible, and in many instances there is acute realization upon the part of the patient of the nature of the crime and its consequences, but we will be convinced of the irresponsibility of such a person by the motiveless method of execution and the open way in which it is perpetrated.

Women suffering from puerperal mania are very apt to commit the most unexpected crimes. Sometimes the acts of violence are entirely misunderstood by juries, and despite competent medical testimony the patients are simply supposed to destroy their children with the idea of ridding themselves of incumbrances; fortunately, however, the crimes are so brutally executed, and often more than one person is murdered, so that no doubt can be raised as to the real condition of the patient. Such a case is related by Winslow. "A woman was delivered of a child on the tenth of December, 1848. At the expiration of a week she was seized with a violent attack of puerperal mania. Mr. Bell of Tilstead, her medical attendant, gave instructions that she should be carefully watched, and on no account have access to her

child. On the twenty-third of December, in the absence of her attendant she persuaded her daughter to bring the infant to her, and obtaining possession of a razor, she almost immediately cut the child's throat. The prisoner appeared quite calm and collected after the occurrence and admitted that she had destroyed the child, and that the crime was premeditated." This case is but one of a large number. Crimes committed by the puerperal woman are very often impulsive and may be preceded by a state of torturing doubt, which the patient generally conceals ; and we find in many women who perhaps do not go so far as murder, a history of morbid impulses which they have resisted for a long time. One of my patients felt a strong desire to kill her child when it was placed in bed by her side, and insisted that it should be taken out of the house during her convalescence. Most authors insist that the presence of the object is a strong incentive to the stimulation of the homicidal instinct. We find that certain individuals are incited to suicide by drowning when they hear the rushing of water, as was the case in an example reported by Burroughs, and this same theory applies to puerperal insanity, in fact, to many of the other impulsive forms of mental derangement. A woman aged about thirty-five who consulted Falret, declared that she had sudden temptations when nursing her infant, to dash it to the ground, trample on it and destroy it. She was also prompted to destroy herself in different ways. When passing through a hallway she was prompted to dash her head against the wall, or if she saw a knife on the table when carrying the child, it was as much as she could do to restrain herself from seizing the instrument and cutting its throat.

General Paresis of the Insane.—General Paresis of the Insane is a disease in which conspicuous mental and physical symptoms are presented. Beginning with slight alterations in manner, which are often disregarded or mistaken, and by very subtle physical changes, the affection very rapidly advances, so that before many months there can be no doubt about the nature of the affection. The disease nearly always follows dissipation, remote syphilis or high living, and as a cause alcoholism or syphilis play important parts—though undoubtedly in many patients no such causes exist, and mental overwork is sufficient to account for its genesis In America, especially, we find that the unreasonable haste to accumulate riches and the overvaulting ambition to keep abreast with the more successful, have had much to do with the development not

only of nervous diseases in general, but general paresis in particular.

Delusions of Grandeur.—The earliest mental change, after carelessness in appearance and habits, is a boastful vanity, —which renders the individual ridiculous—mere lying is followed by the wildest Munchausen *braggadocio.* He will perhaps tell you that he has horses which are faster than any in the world. That his diamonds exceed in value the crown-jewels, or that he has crossed the Atlantic several hundred times when he has perhaps been only two or three. Later on he grows more expansive. No scheme is too great for him. One man told me that he had hired Patti, Nillson, and all the great prima donnas, and had built an opera house ten miles long ; another that he could speak all the known languages including Arabic, Sanskrit, and the Hebrew although he was a printer with scarcely any education to speak of. Many paretics believe themselves possessed of extraordinary physical force and avow their power to lift the heaviest weights and perform the most extraordinary feats. The grand delusions of some take the form of sexual capacity, and it is not rare to find them boasting of powers that excelled those belonging to any of the personages of the Old Testament who possessed innumerable concubines. With this there is foolish extravagance, and the purchase of useless things. One man will contract for property for which he cannot pay, or buy numberless pictures for which he has no use. He will order large quantities of jewelry or precious stones. He resents interference and the counsel of friends with violence, and plunges into the wildest excesses. He debauches himself and consorts with prostitutes, and no form of bestiality satisfies his desires At this time it will be noticed perhaps that his pupils are unequally dilated, one being larger than the other (usually the right)—or that they are contracted to the size of pin-heads. His tongue when protruded trembles slightly, the tremor being fine, and accompanied with sudden retraction of the whole organ when the effort is continued to keep it protruded. As the disease advances the lips in turn become tremulous, and the corners of the mouth uneven. The speech is clumsy, and there is great difficulty in pronouncing the labials and lingual consonants. The mental state keeps pace, and the delusions are more marked—they are however occasionally concealed, but this is rare. It is common to find fits of violence from time to time, and in these the patient may be actualiy dangerous. In some cases. and by no means a small number,

there is an initial stage of melancholia, and I am convinced that this is more marked in cases of general paresis following alcoholism. Epileptic attacks, or attacks of hemiplegia often occur during the course of the disease, but these latter are indications probably of some organic disease which occasionally accompanies the disease.

Periods of Remission.—A feature of general paresis are the periods of remission, which may last several weeks, during which the patient is apparently sane, but they never continue for any great length of time, and the mental and physical symptoms reappear with great violence. As the malady becomes established there are changes in the gait, which is titubating and unsteady. The patient's ocular condition may vary, the pupils for a time becoming equal, and afterwards unequal again. The temperature is elevated during the disease, more particularly throughout the late stages, and generally after periods of excitement or convulsions.

Dementia is the ending of general paresis, and an enfeeblement of all the mental powers takes place. The disease is remarkably rapid in its downward progress. It commonly ends fatally in three years, yet there are cases where it has lasted eight or ten years, but these are by no means common. The French authors are disposed to consider the average duration of the disease to be less than two years, and some English writers fix it at twenty-two months. The duration of the remissions is extremely variable. Baillarger has reported 19 cases in which the period of the remission varied from one month to two years. Le Grand du Saulle has presented 6 cases in which it varied from ten months to two years. Dagonet believes that during the remission there is a state of mental feebleness which is incompatible with perfect responsibility.

The early stages of general paresis are sometimes likely to be the subject of legal inquiry. In the beginning of the disease the individual's extravagant plans are apt to be looked upon by laymen as simply evidences of great business tact and energy, and sympathetic juries do not take the trouble to ascertain whether the expenditures are in keeping with the means of the individual. So, too, during the lucid intervals of the disease, legal steps may be taken which are not warranted by the history of the disease.

Disputed Cases of Paresis.—In many cases, and that of Henry Prouse Cooper was an example, the question of alcoholism arises. In this case, it was urged that his peculiar be-

havior was simply the result of the immoderate use of alcohol, and it was attempted to show that some of his physical expressions were those of alcoholism. Nothing of the kind was made out, and when we come to carefully compare the two diseases, especially in regard to their stages, it is easy to make a diagnosis. The testamentary capacity of a person suffering from general paralysis should always be doubted, especially when the question of extraordinary or unjust bequests are made under the influence of the extravagant delusion.

His early extravagance may lead to civil suits, and unsuspecting tradesmen are astonished to find that their liberal customer is after all a lunatic. So too may his destructive propensities get him into trouble. The interference of any one who presumes to dispute the paretic's right to do just as he chooses, is very likely to be assaulted, but crimes of this kind during the early stages of the disease are not common. In certain irregular cases, however, the subject may, under delusions, indulge in homicidal tendencies. The two following are examples, and both patients were confined in the Utica Asylum :

"Man, aged 56, married, five children, laborer. He had borne the reputation of being an intemperate, vicious man, and had spent the season in the County House ; was arrested, wandering about the streets in a drunken condition, and placed in jail. Here he developed delusions, regarding the chastity of his wife, became maniacal and violent in threats and actions, and fractured the skull of his keeper by throwing a heavy padlock at him. He was sent to the County Asylum as an insane man, where he was violent in speech and action, and made homicidal attacks upon his keeper ; thence he was committed to the Asylum at Utica. After admission said he tried to kill the keeper because he was violating the chastity of his wife, in an adjoining room. He soon developed delusions of wealth and power, presented the marked physical characteristics of paresis, gradually failed, and died in about six months."

"Man, aged 28, married, farmer, temperate. Patient was a soldier in the late war, and while in the service, suffered from rheumatism and chronic diarrhœa, and never regained former good health. He read and studied the Bible a great deal, as the embodiment of the higher law, and upon this study based his claim to being an educated and superior lawyer. For three or four years had entertained this delusion, and during this time had neglected his legitimate work, claiming he was fully

engaged in legal business. He went about talking to people of legal matters and serving papers upon various persons, of an incoherent and peculiar character, much to their annoyance. Was recognized by people generally as a lunatic. He attended an auction, and having bid off some articles, gave his note for them, which was worthless. The patient was about to take possession of them, but being opposed by the owner, attacked, choked, and upon his attempting to escape, fired at him with a revolver. For this he was arrested, placed in jail, where he was noisy and sleepless, and thence brought to the Asylum, on a criminal order. He had exalted delusions of his own power, asserted he had direct communication with God, was noisy at night, talkative, and refused medicine, and at times food. After about six months he was transferred to the Asylum for Insane Criminals."

Relations of Criminal Acts to Sleep.—A peculiar mental condition named by the Germans *Schlaftrunkenheit*, or SLEEP DRUNKENNESS, leads sometimes to the commission of a variety of acts for which the individual is usually clearly irresponsible. In the hazy mental state between sleeping and waking, there may be a veritable condition of somnambulism. I have known of a gentleman who sometimes did the most purposeless things immediately after being aroused. He was a man of most exemplary habits and refinement, and yet swore like a trooper when suddenly awakened upon one occasion from a sound sleep in a railroad car, when asked for his ticket. He often struck his wife during the night under the impression that she was a burglar with whom he was having a struggle for life. Instances of homicidal violence are reported, and not only may this question arise as a legal defense, as it did in the case mentioned by Bucknill and Tuke, of the woman who threw her child out of the window; but it may become a question for divorce proceedings, or theft.

The medico-legal questions arising in connection with somnambulism are interesting, and it cannot be denied that the somnambulist is irresponsible for actions which are the result of unconscious cerebration. The courts all hold that when he does not preserve the rational use of his will, and is deprived of the cognition of outward surroundings, he cannot be convicted.

In cases of homicide committed in the half somnolent state, it is well to ascertain *all* the facts in the case, for there may be in addition to the somnambulistic condition an element

of actual insanity. Dr. Gray reports the following case, which may be presented in illustration :

" Male, aged 29, a boatman, of intemperate habits, and of insane parentage ; had been in a melancholy state for some months. His father went to his room one evening to ascertain whether his son was at home. Having no light, he repeated his name several times. Patient, who was dozing upon his bed, sprang up, thinking his father was shouting for help, seized a club, and encountering him in the dark, killed him by a single blow. Was demented when admitted to Asylum. Discharged, recovered."

Somnambulism and Epilepsy.—The complication of epilepsy with somnambulism often exists, and the following interesting case of murder committed by a young man, is reported by Dr. Yellowlees :

" James Fraser was 28 years of age, married and had one child. He was pale, dejected, hair black and always rigidly erect, general health and habits good, and he was in regular employment. As a child he was rather dull and stupid, and his father always thought there was a 'kind of want about him ;' as a man his intellect seemed below the average, but not so much so as to attract attention, nor to prevent him from earning a livelihood. His mother and maternal grandfather were subject to 'fits,' and died in this condition ; these were doubtless epileptic, from the description. His maternal aunt and her son were inmates of an asylum, and the child he killed had had convulsions about six months before this.

" He had always since a child been a somnambulist, and in this condition had often had delusions that he was attacked by some wild beast, or that the walls of the house were about to fall in upon him ; and under such delusions would chase the imaginary beast about the house, hurling chairs and tables at it, with his eyes wide open, and avoiding any article of furniture in his pursuit. Sometimes he would seize his companion by the throat, thinking he was struggling with the beast, and afterwards was quite unconscious of having assaulted any one. It was in one of these attacks that he killed his child ; he thought he saw a wild beast fly up through the floor and pass toward the back of the bed where the child lay ; he grasped at the beast, trying to catch it ; succeeded in seizing it, and springing out of bed, dashed it on the floor or wall to destroy it. This awakened his wife, who got out of bed and found that he had killed the child, its skull being extensively fractured. He

then came to himself, and evinced the greatest remorse and sorrow, ran for a doctor, and did all in his power for the child.

"Fraser was tried at the High Court of Justiciary in Edinburgh, on July 15th, 1878. On being asked to plead, he said: 'I am guilty in my sleep, but not guilty in my senses.'

"The trial then proceeded, and a special defense was lodged that at the time of the alleged crime the prisoner was asleep. Several medical men were called who agreed in testifying that when the fatal occurrenee took place, Fraser was under the delusion that he was killing a wild beast, and was entirely unconscious of the real nature of the act. They also agreed in thinking that all somnambulists are not insane, and that there is no recognized category of insanity under which somnambulism is included.

"The important question was whether, in the wild paroxysms which distinguished this extremely aggravated case, Fraser was or was not technically legally insane, for had he been so found, his committal to a criminal lunatic asylum would have been inevitable, and this would have seemed a peculiarly hard fate for a man who is sane except for a few minutes of unconscious excitement recurring every two or three weeks. And on this question the medical gentlemen differed. Therefore His Lordship suggested to the jury the following verdict, which was at once and unanimously accepted:

"'That the jury find that the parent killed his child when he was unconscious of the nature of the act which he committed by reason of a condition arising from somnambulism; and that the parent was not responsible.'

"Two days later Fraser was set at liberty, an undertaking having been given by himself and his father that he would henceforth sleep in a separate room, apart from any other person."

Many writers allude to the case of a man who awoke in the night and saw a fearful specter. He called out "who is that?" and receiving no answer raised his hatchet and struck at the advancing phantom. It was found that he had killed his wife. A case related in the British and Foreign Medico-Chirurgical Review and referred to by Hood, is that of a peddler who was in the habit of going about the country with a sword stick. While asleep by the side of the road one evening he was roughly shaken by some practical jokers. The peddler suddenly awoke and seizing his cane plunged it into the body of the nearest man. He was tried for manslaughter and convicted, notwithstanding the testimony of medical witnesses that his mental condition at the time

was one of irresponsibility. It was adduced that the act after all might have been due to passion. If there had been no provocation such an explanation would have been absurd, but as it was it must be said that it might have been an element in the case.

Cases of suicide in the half somnolent state are occasionally reported. An old lady awoke in the middle of the night, went down stairs and threw herself into a cistern of water, where she was found drowned. It was held that the suicide was the result of certain mental impressions conjured up in the mind during a horrible dream.

Hereditary Influence.—The question of hereditary influence is often referred to in courts of law and much importance is attached to the admissions of the medical witnesses. It is only in late years that evidence showing the existence of insanity of the ancestors of an individual has been admitted. The case of the Queen vs. Rose Touchett in 1844 was the first case in which the decision of Chitty was reversed. Hereditary tendencies are so important that in every case they should be shown to exist if possible, but some caution is necessary. Vague history of mental disorder, such as eccentricity, is almost valueless when it exists alone; but when it can be shown that the parents of the alleged lunatic have been deranged the matter is different. According to the experience the tendency to mental disease is greater when insanity has existed in lineal ancestors. The insanity of aunts and uncles or cousins has no such importance as the insanity of the grandfather or grandmother, the mother or father, or the sister or brother. So, too, we should take into consideration the date of the remote insanity, for that occurring after the birth of the child does not necessarily show that there is any reason to suppose it to be the subject of any inherited tendency. An exception may be made, however, in those forms of insanity which crop out late in life in persons in whom the insane predisposition exists. Baillarger's conclusions, referred to by Bucknill and Tuke,* show that the insanity of the mother is far more serious than that of the father as regards transmission, and so, too, the transmission from the mother is more apt to be shown in girls than boys, while the reverse is true regarding the insanity of boys. Of course the existence of insanity in several members of the same family is serious. In epileptic insanity it may be found that the mother of the patient has

* Manual of Psychological Medicine, p. 63.

suffered from migraine or some other form of nervous disease, and it will often be found that the existence of phthisis, as shown by Anstie and others, is very apt to predispose to the development of epilepsy in the following generation. It is a common thing to find organic nervous diseases occurring in the parent after the birth of the alleged lunatic, brought forward as an hereditary factor when it often has no connection whatever with the possible mental disease. In the matter of prognosis hereditary tendency is a very dangerous factor. The prognosis of insanity is fairly good in acute forms—mania better than melancholia, but with dementia, general paresis or insanity, dependent upon organic diseases of the brain the case is different. Recovery sometimes follows, even after insanity lasting a number of years, but this is rarely so ; or an acute disease may break up the condition and turn its course. Prognosis is better in young subjects than old. Epilepsy in complication is a bad feature. Insanity, coming after the change of life, is very apt to run into dementia.

Post Mortem Examination of the Insane.—In cases of suspected insanity where during lifetime its existence has been doubted, the matter is often settled by an examination after death. As I have already said we cannot predict that distinguished cerebral disease always exists with insanity, that is, disease which gives rise to the insanity ; on the other hand, it is not uncommon for us to find very extensive and general gross lesions producing no appreciable disturbance of intellect ; so in our limited state of knowledge it is not well to be too positive.

We must consider in all cases the configuration of the brain, its size, and the depth of the gray cortical substance, as well as the signs of recent disease. If a small brain has an increased specific gravity which is disproportionate with its size, we shall probably find the existence of sclerosis and atrophy. It has been found that the weight of the brain undergoes decided modifications in connection with insanity, and Dr. Clapham of the West Riding asylum, who has done so much in craniometry presents an interesting table which includes 1200 cases of insanity. It would appear, according to this, that the weight of the brain is greater in the insane, between the ages of 40 and 50 in women, and between 50 and 60 in men, than at any other time ; that in the male the brain weighs more proportionately in idiocy than it does in the female ; that the average weight of the brain is greater in mania than melancholia, and in other

forms of acute insanity than in senile or organic dementia, imbecility or general paresis.

Disease.	Encephalon, (Grammes.)	Cerebellum, Pons and Medulla.	Age.
Idiocy,	1148.947	156.7	21.94
Imbecility,	1285.009	174.6	36.2
Dementia (simple),	1310.956	169.7	49.132
Senile,	1278.382	163 8	64.843
Organic,	1291.949	170.5	53.810
Mania, Melancholia and acute forms,	1350.425	172.8	42.082
General Paralysis,	1270.271	174.0	41.610
Epileptic Insanity,	1314.410	164.4	36.646
Chronic Mania,	1327.267	171.9	46.863
Brain Wasting,	1256.644	164.3	60.929

It is a popular but erroneous impression that the largest brains belong to the possessors of the greatest intellect. This is far from the truth, for one of the largest upon record belonged to an idiot. The left frontal lobe is, according to Broca, heavier than the right, and Luys has found a difference in favor of the former of from five to eight grammes.

The depth of the gray matter of the convolutions we are enabled to detect by means of an instrument invented by Dr. Herbert Major. This consists of a glass tube finely graduated, by which we may remove portions of the cortex of the brain by thrusting the gauge into the particular convolution, the depth of which we wish to determine, and removing a plug of white and gray matter. It will be found in certain forms of insanity that the depth of the gray matter has undergone material diminution ; and in certain cases, notably those where congenital deficiency is suspected, we shall find that the proportion of the white and gray substances is very much changed, the latter being reduced. In measuring the depth of the gray substance of the convolutions it will be found that it is reduced from eight one-hundreths of an inch to six or seven one-hundredths. Bucknill and Tuke prefer measurements made with a hair divider, a variety of small compass, to the instrument invented by Herbert Major.

Benedikt and other German writers place great reliance upon peculiarities in the arrangements of the convolutions and sulci in the brains of insane criminals. While I do not believe that Benedikt's ideas are always susceptible of proof, it is still a noteworthy fact that in the brain of the congenital criminal there is great complexity and irregularity in the arrangement of the convolutional folds, and fissures. In his book upon the subject he presents a number of autopsies

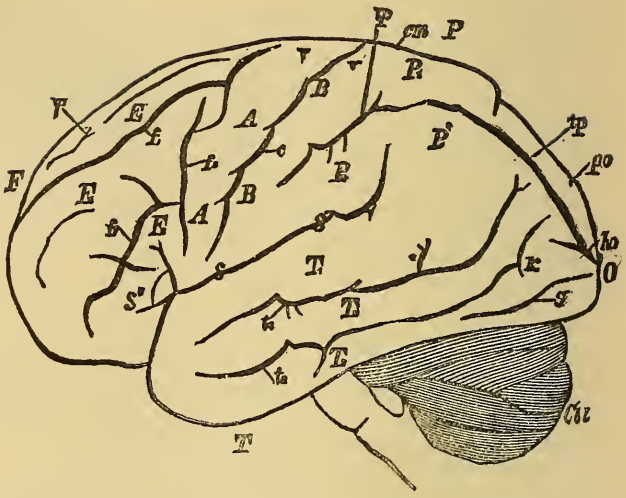

Fig. 1.
(Benedikt).
External fissural arrangement of a typical brain.
(For reference see American translation.)

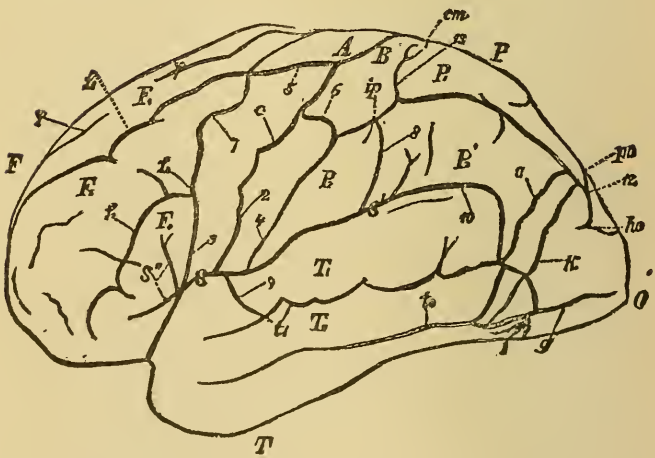

Fig. 2.
(Benedikt).
External fissural arrangement of an atypical brain.

the subjects of which were criminals, and in every instance there were certain peculiarities which he has minutely detailed, and these consisted not only in the excessive fissure development, but in the repeated existence of asymmetries of the brain and the skull itself. The parietal lobe was usually dwarfed, the cerebellum was only partially covered by the occipital lobe, and there was a deficiency in Wernicke's fissure ; the inter-parietal fissure communicated very frequently with the fissures of Sylvius, and the parieto-occipital with the horizontal and inter-parietal.

We are also to look for asymmetry of the two hemispheres, and for convolutional errors of development.

The brain in imbeciles and idiots presents malformations and arrestment of development which are very characteristic. These modifications take the form of atrophies of parts of, or groups of, convolutions of the cortex ; and the partial atrophies are revealed by a thinning of the folds, and by a corresponding enlargement and depth of certain fissures. These are principally in the frontal convolutions, which present irregularities of formation. Asymmetry is very noticeable in the brains of idiots, the two lobes presenting very often a want of correspondence which is very decided. From a histological point of view we find arrested development depending upon defects in the apparatus of nourishment in the cortical substance.

Luys * has devoted much attention to the subject of the convolutional anatomy of the brain in the insane, who finds that the fissure of Sylvius is usually enlarged, and extends much further back than it does in the normal brain, exposing the insula. The fissure of Rolando is very nearly normal, but its continuity is interrupted by irregularities which jut out from the marginal convolutions.

Luys has collected pathological data of great interest which show that certain definite convolutional changes are to be found in many cases of insanity. The most frequent, according to him, are seen in the *frontal* convolutions which are much more irregularly disposed in the right than in the left lobe. The first frontal, especially, is very frequently atrophied and diminished in breadth. Luys has found in a case with well marked hallucinations that in the internal aspect of the cerebral hemisphere the paracental lobule jutted out, and the first frontal was depressed, and the second frontal had undergone at its anterior part decided irregularities. Here its continuity was

* Traité clinique et Pratique des Maladies Mentales, 1881.

broken up by a series of secondary multiple folds having a vermiform appearance and bridges over the superior frontal fissure which was obliterated. In certain cases of chronic dementia the second frontal convolution becomes almost rudimentary. The third frontal convolution (the speech center) is rarely modified except when there is aphasia. Luys has found in three deaf mutes that it was atrophied upon the left side.

The ascending frontal convolution often presents change in its length and continuity. At its union with the second frontal we find numerous variations, and Luys has seen a change at the origin of the third frontal. The ascending parietal is quite rarely affected except in cases with paralytic symptoms. I saw a case, the drawing of whose brain I present, who had in addition to chronic mania and dementia well marked paralysis and contracture upon the opposite side of the body ; the insanity began shortly before the paralysis and the secondary dementia appeared very rapidly. Luys is of the opinion that the ascend-

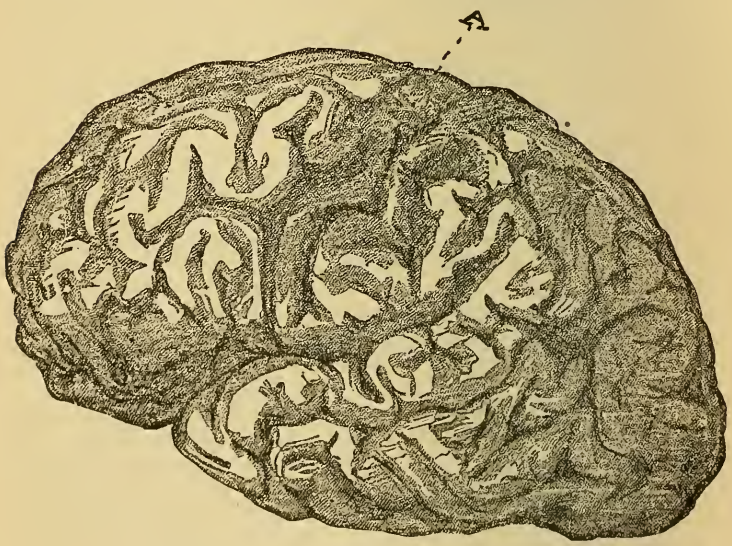

Fig. 3.
A. Atrophy of ascending frontal and parietal convolutions.

ing frontal and parietal convolutions least often present pathological changes. The angular gyrus is sometimes affected, and in cases with visual hallucinations it probably is frequently.

The internal surface of the brain shows that the paracentral lobule is often the seat of pathological changes, on one side or both, and it is the opinion of Luys and other writers, that in advanced cases of dementia both lobules will be affected.

In the insane it will be found, especially in forms of chronic mania, or where there has been excitement, that the meninges are thickened, hyperemic, or that there are collections of blood known as hematomæ. The dura mater is often adherent to the skull, and the other membranes show evidences of various grades of inflammation, and it is difficult to remove the arachnoid and pia mater without tearing away more or less of the brain substance. There may be found lesions of the blood-vessels, which vary from simple congestion to atheromatous degeneration or permanent dilatation, and this is found either in the substance of the meninges or in the brain itself.

The vascular condition is either one connected with hyperemia or anemia. Evidences of hyperemia are common in disease attended with excitement such as mania or paresis. The gray substance is darker and the white is more pink or yellow than in health. Minute *punctæ vasculosa*, extravasations or local tracts of active congestion are found. In general paresis Luys has found these spots of hyperemia more marked in the frontal region, though in this disease it is common to find the congestion very general. In melancholia we meet with a pale condition of the tissues, with diminished vessels and perivascular accumulation of fluid. The brain is blanched and soft. Territories of edematous brain are found in association with the plugging up of small vessels by an embolus, or as the result of thrombosis. Evidences of cerebral ischemia are important.

There may be bony plates in the dura mater which are very common in chronic insanity, or adventitious substances scattered over the surface of the brain, both at the convexity and the base.

The brain itself presents certain changes in the appearance of its convolutions and deeper parts which are quite conspicuous. We may find softening and sclerosis giving rise to atrophy and depression, and changes of color which are always important and suggestive.

Solly, who first made extended examinations of the cortex in insane patients, found a paleness of that portion of the brain, particularly in cases of imbecility, and the white matter of the brain assumed a "dirty brownish hue," very faint but quite distinct.

The lining membrane of the ventricles is often thickened, and

the seat of a granular change, and an accumulation of serous fluid not only in these cavities but in the meshes of the arachnoid, both at the upper surface and at the base of the brain is present. The substance of the brain may be the seat of a diffused change, there being small collections of indurated tissue which are so frequently present in general paresis. In insanity produced by alcohol this appearance is particularly noticeable. In other cases we find collections of gummatous substance peculiar to syphilis. In still others, those with diseased vessels, there is one or more blood clots partially organized, and perhaps some softening.

In many brains we shall find a condition known as the *etat criblé*, which consists in a number of small openings giving to the brain a porous appearance, and it is a result of a previous hyperemia from probable exudation of serum and atrophy. It is rare to find increase in size of the brain as an indication of chronic insanity. Atrophy is much more common.

Attention may be called to the thickening of the cranial bones in chronic insanity and the existence of bony spiculæ which is sometimes met. Greding presents 216 autopsies; 167 of these presented thickening, and 38 more or less thinness of the bones.

In *melancholia*, Luys has found in several cases great hyperemia of the gray substance of the third ventricle. The left optic thalamus presented on its internal face hyperemic redness, which was also found in the third ventricle. The gray substance of the cortex of one of these patients was thin, and most of the convolutions appeared of a pale color, with irregular vascular arborizations irregularly disseminated. It seems to be a peculiarity of this form of disease that there is a general ischemia with localized spots of hyperemia.

In some cases of profound *melancholia with stupor*, the brain was found to be completely exsanguinated, the white substance deprived of vessels, and an appearance of atrophy of the cortex and small vascular groups was presented (de petit boquets vasculier disposer enilots).

In cases of *general paresis* excessive and abundant proliferation of the neuroglia with choking of the nerve-cells was apparent, the latter being diminished in number. The white substance presented the same appearance of sclerosis, the nerve fibers appeared as withered filaments, and were torn and much reduced in size; and there were areolas which marked the disappearance of nervous elements.

In *acute mania*, Luys found evidence of active and violent

hyperemia in all parts of the brain, but the vessels of the corpora striata were most dilated and engorged, and the white substance was as much injected as the gray. In one of his cases there was yellow coloration of the insula, with degeneration of all the nerve elements of this region. In another an old foyer of softening occupying the center of the protuberance was found, the walls of which were encrusted with coloring matter, granular corpuscles and crystals of hematoidin, which indicated the existence of prolonged congestion, and which for some time had played the role in this region of a pathological point of irritation.

The microscopic appearances of diseased nervous tissue are perhaps of greater interest than any others, and in cases where no grave lesions are presented the microscope will often reveal delicate changes which consist most commonly in degeneration of the nerve cells of the cortex, and vascular hyperemia and its consequences. The large cells of the cortical gray substance often break down, and leave in their places collections of granular matter which may be either found in isolated masses, or the cell wall may be intact and its contents entirely disorganized, there being disappearance of the nuclear elements. We shall also find that the inter-communicating fibers and nerve cell processes are broken off, and that the inter-cellular connective tissue is increased, with proliferation of the neuroglia cells, and perhaps there may be the appearance of amyloid bodies. The bloodvessels are choked. There is exudation of coloring matter and infiltration. In hyperemic states the vessels are dilated, their walls are covered by fat granules and hematoidin crystals. Sometimes masses of pigment are found. The vessels are varicose or disrupted, and the peri-vascular spaces may be filled witn exudation corpuscles.

The nerve cells undergo change in disease which are so decided as to have attracted the attention of several observers, Luys among the number. It has been found that in cases of insanity with hallucination they are greatly increased in size, and Meschéde has found that in general paresis the increase in size of the central cells was very decided. Luys on the other hand has found a reduction of the cells in general paresis as well as a diminution in their number. In some brains we find small vacuoles scattered through the brain substance, which, however, are more often the result of careless manipulation (as they were in the Guiteau brain), than of a pathological process.

In this connection a word of caution is necessary, for it is a very easy matter through improper hardening or incautious

staining to so alter the arrangement and character of the anatomical elements as to produce appearances in every respect resembling those of actual disease. Hardening in alcohol is quite likely, unless great care be used, to have this result, and sometimes carmine staining with a badly prepared solution will give granular changes which are very confusing. In hardening the brain, especially where medico-legal questions are involved, we must frequently change the fluid, protect it from dust, and conduct our manipulations in a systematic and careful manner; and it is well to have our observations confirmed by another person.

It is a well known fact that heart disease is very common among the insane, and autopsies reveal hypertrophy and valvular obstruction in melancholia, and usually some dilatation where the mental disease has taken the form of excitement. In chronic forms of insanity, such as dementia, we find fatty degeneration in connection with atheroma, not only of the large vessels, but of those of the brain as well. In other forms of disease it is not rare to discover evidences of renal or hepatic degeneration and pulmonary complications leave signs of their presence during life.

CHAPTER II.

THE LEGAL RELATIONS OF INSANITY.

We now come to the consideration of the special questions that may arise in connection with the legal investigation of the acts of a person who is presumably insane. The welfare of the individual, and of society at large, necessitates the most careful and patient consideration of the nature of the behavior and responsibility of the alleged lunatic.

Naturally there is much difference of opinion, and in the unsettled state of our knowledge of mental disease grave mistakes are frequently made. The medical man looks more humanely, perhaps, upon this weakness of the person, and considers the mental vagaries as the result of disease—in fact, he is too often inclined to build up an impossible standard of mental integrity and loses sight of the perversion for which the parents or guardians and the subject himself are directly responsible. The jurist, on the other hand, is disposed to take an unnecessarily hard and practical view of the situation, and is apt to disregard the facts of medical science. The legal tests are sometimes too arbitrary, or perhaps too loose, and are not warranted by the conclusions of carefully made psychiatric data.

Legal Tests.—We are called upon to testify in court in civil and criminal cases under the following circumstances:

1. In civil cases where the validity of a will or contract is questioned—where the nature of the instrument and the disposition of the property suggest unsoundness at the time the instrument was made. In cases where the ability of the individual to manage his affairs and take care of himself is questioned, and to appoint for him a guardian. In cases where a marriage or other contract has been made by an insane person. In cases of divorce.

2. In criminal cases where the acts have been committed by an insane and irresponsible person.

Many troublesome points arise, even though the facts are often clear, and our task is usually a difficult one. Especially is

this true in instances where the departure from normal mental health is slight, or where the insanity is shadowy and poorly defined. In individuals of weak mind the delicate question of responsibility should be patiently sifted.

The Border Land of Insanity.—There are a large number of individuals who are not insane in the legal sense. These persons are the possessors of the insane temperament, and in mental constitution are so peculiar as to to attract attention of those with whom they come in contact. The shades of defect are of the most varied description. Actual weakness or silliness, or harmless eccentricity may exist, or there may be viciousness and criminal tendencies which may render the person dangerous to society. In such cases there may be a considerable degree of intellectual vigor, but the mental operations are directed in a channel which degrades the individual, and a defect of moral depravity exists which crops out upon every occasion. The criminal class is largely composed of these persons, and ordinarily, hereditary tendencies and early neglect are at the root of the trouble. To such a class belonged Guiteau the assassin, who showed a remarkable vigor of mind and a sickening moral nature. Ruloff, the Binghamton murderer, was another, who, though his intellectual gifts as a philologist were something extraordinary, and who was a laborious student, delighted in committing innumerable robberies and petty crimes, but ended his life on the gallows for the murder of a clerk who attempted his arrest. Though not actually insane in the legal or medical sense, both of these men are pitiable examples of the "badly arranged mind," and though presenting no pathological insanity, were of eccentric mental organization. The Germans especially have devoted much care to the establishment of various grades of weak-mindedness, and Krafft-Ebing and others have under the names *primäre* and *originäre verucktheit* defined these kinds of moral depravity of congenital origin. I regard many of these delicate distinctions as founded upon a too sentimental plane, for if we are to excuse men who are simply *bad* for the crimes they may commit, we shall open the doors of escape for all manner of wickedness.

The Guiteau Case.—Guiteau, as I have said, was an example of the class of neurotic criminals which is so large, and so constantly increasing, and in his case had there been proper environment, he might have become at least a harmless member of society, if not a useful one. I may be pardoned for going

into this case rather extensively, and will make use of notes previously published.*

Charles Julius Guiteau, aged forty years, is of spare build, of nervous temperament, weighs one hundred and thirty-five pounds, and is five feet five and three quarter inches in height. He is badly nourished and anemic.

In appearance he resembles the criminal known to the police as the "sneak," and his physiognomy is one more familiar to the visitor at the prison than the asylum. The facial lines are deep, and express the constant exhibition of the baser emotions. There is a slight furrow between the brows ; the nasal lines are deep, the nose thin and pointed ; and the lips are thin and usually slightly parted. His hair is short and mixed with gray, and so cut as to give some appearance of flatness to the top of his head. At the anterior part of the left side of the head is a slightly depressed scar about three cm. long, the lower edge being about nine cm. above the center of the external auditory meatus, and the superior extremity about six cm. below the longitudinal median line. There is no evidence of premature closure of the sutures, no bregmatic depression, and no cranial exostoses. The conformation of the head is no way atypical, neither *brachy-cephalic* or *dolicho-cephalic*. The basal circumference is 55.9 cm. The antero-posterior arch 20.2 cm. ; the transverse arch 16.5 cm. ; the basal antero-posterior diameter 19.5 cm. † A *conformateur* measurement taken at a higher level posteriorly at the plane of the parietal eminences reveals no special asymmetry. ‡

There is slight fullness on the right side both anteriorly and

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* Boston *Medical and Surgical Journal*, May, 9, 1882.

† It has been stated by a writer in the *New York Medical Record* that my measurements were made at so low a level as to prevent me from recognizing the existence of an alleged ridge of bone passing across the back of the head. The writer was not probably aware at that time that this *conformateur* measurement was taken at the high level, but nothing was shown. I would take this occasion to refer to the trick of the prisoner's counsel, who placed the conformateur tracing over one of the above—of course they did not agree.

N. B.—Subsequent measurements made upon the naked skull, and the tracings made by Dr. McConnell of the Army Medical Museum fully substantiate my original measurements.

‡ Clapham (W. R. Reports, vol. vi., 1876, page 150), gives some tables of skull measurements. He found that a man weighing 130–140 pounds should have a head with circumference of 21.993 inches. A man 65 inches high should have a head with circumference of 22.016 inches. It will be seen that the head of Guiteau was of fair size according to Clapham's figures.

posteriorly. I did not calculate the facial angle, there being nothing to attract attention. There is no appearance of *hematoma auris* or crenation of ears so often found in the chronic insane, and his skin showed no abnormal change, being moist and not scurfy. The fingers were devoid of ungual defects, there being no hangnails, no clubbing, no temperature nor circulatory changes. The teeth are regular, but the two first incisors in the upper jaw are separated by a slight fissure which increased the malignity of the prisoner's facial expression when his mouth was open. The back teeth are carious. There is no abnormality in the roof of the mouth, no extreme vaulting of the palatine process of the superior maxillary bone, and no fissure.

When the prisoner was told to open his mouth he did so, and the opening was symmetrical, there being no defective muscular antagonism. Upon my first visit I found what appeared to be a fine fibrillary tremor in the upper cheek-muscles, and eyelids, but this was after an exciting day in court, and I never saw it again. The unequal tremor of the tongue, alluded to by Dr. Folsom in his able paper, was not observed by me except upon this occasion, and it was not manifested except when the tongue was kept protruded for some time. In no respect did it resemble the tremor of general paresis, and it was *not accompanied by tremor of the lips.* The tongue was protruded slightly to the left side, but there was no atrophy whatever, and it could be freely pointed to the other direction, and its tip approximated to the roof of the mouth. I tested his speech carefully, but found no impairment, but in court he momentarily hesitated because his ideas were evolved too rapidly, and the function of the cerebral speech centers did not seem to keep pace. A careful ophthalmoscopic examination failed to reveal any neuritis or atrophy, and Dr. Loring was equally unsuccessful in making any discovery of ocular trouble. We found him to be hypermetropic, and the left eye was the seat of conjunctivitis at the first visit, and quite sensitive, and as a result the pupil was slightly contracted, but only upon one occasion was this observed, his pupils being afterwards normal, and contracting perfectly to diffused and artificial light. The pupils were not contracted as is the case in the early stage of general paresis.

Tests of motility were negative. He walked well without any drag, and there was no disturbance of coördinating power. I tested the tendon reflex in the extremities both by Buzzard's and Gower's method, and in the ordinary way, and I failed

after repeated examination to discover any abnormal increase, and light and heavy blows failed to evolve a *jerk* of any kind, but there was moderate responsive action, equal on both sides, with no secondary jerk. Hand grasp unaffected, and he could localize small objects. Hearing was normal. Retains urine for several hours even when excited, and when passed it is neither forcibly ejected nor does it dribble. He says he has had a gonorrhœa, and his stream is spiral, so he probably has some stricture. He denies *absolutely* that he has ever had *syphilis*, and no evidences are found. He has a small herpetic patch on the forehead, but this is probably due to his depraved physical condition. There is no evidence to show that he has indulged in bad sexual habits in jail. Pulse found to be 88 upon two occasions. Temperature taken daily by jail physician shows no abnormal rise.

It would be going over much wearisome ground to again attempt to analyze the evidence introduced in court except to insist upon what I believe to be the truth, that he is an eccentric criminal, who has been playing a part in court that might at least (if not humbug the experts) affect the jury, and gain for him a disagreement.

None of the expressions of disorderly mental action upon the part of the prisoner, either isolated or with others, were, in my opinion, incompatible with sanity, nor indications of any known mental disease. The evidence brought forward was such as to show that the prisoner had been brought up badly, and had, from the time he began to look out for himself, lived as a parasite upon society, making use of all methods of shrewdness and deception to gain shelter and food, until he found his path in life becoming more and more difficult to follow, and then he resorted to more desperate methods. Like the murderers in Macbeth he might have said :

> " I am one, my liege,
> Whom the vile blows and buffets of the world
> Have so incensed that I am reckless what
> I do to spite the world."
>
> . . . . . .
>
> " And I another, so weary
> With disasters, tugged with fortune,
> That I would set my life on any chance
> To mend it, or be rid on 't."

When we analyze his actions I do not think there is any alternative for us. We can only say that his crowning crime was the culmination of uncontrolled wickedness, and his convic-

tion and sentence the natural result of the failure of his last desperate scheme.

Thomas Beggs Gilpin,* in speaking of the psychology of crime, says, "It matters not what may be the character of the crime; it may be arson, it may be rape: the first successful gratification of vindictive feeling leads by similar progression to the one; the first flirtation of simple sensuality, unchecked, if not encouraged, leads by the like gradation to the other; in all cases progress from venial to bad, from bad to worse, and thence to extremes, is the invariable trait of a criminal career; consequences are first calculated with anxiety, then merely weighed against immediate gain, and finally disregarded altogether."

There are thousands of men at large to-day who display all the eccentricity of Guiteau, but their actions are as impulsively good, or at least their intentions are as well meant, as his were bad, and still they are not called insane. In some cases these persons are reformers, with projects in every way as absurd as any of Guiteau's. What can be said of the educated individual, for example, who advocates the abolition of vaccination?

Guiteau is only a shrewd scamp, with the plausibility of an Alfred Jingle in swindling his boarding-house keepers, and evading the payment of his debts; the visionary enthusiasm of Micawber or Colonel Sellers; the cant and hyprocrisy of Aminadab Sleek or Uriah Heap; the ambition of Erostratus, and the murderous manners of Felton, who assassinated the Duke of Buckingham, of whose crime the killing of Garfield was an almost exact counterpart.

None of his "delusions" were akin to those of general paresis of the insane, for in that disease there is no reasonable basis whatever, and, moreover, if Guiteau is a general paretic, as Dr. Folsom suggested in a communication, his boasting and immense projects have been expressed for at least twenty years, and there are few cases of general paresis that live beyond the tenth year of the disease, and they nearly all end fatally in three or four years, or less. Guiteau's projects were, as a rule, substantial, and were at some time realized.

The *Inter-Ocean* scheme was a pronounced success; the *Theocrat*, conducted, perhaps, in a more modest way than Guiteau might have wished, had an existence of several years as the *New York Daily Witness*, a small religious daily paper; and even his last and most fatal "delusion" was verified, for

* Forbes Winslow's *Journal of Medicine*, vol. v., p. 177.

he *did* "unite the Republican party," and his act has thoroughly changed the features of American politics. In some countries where a president is assassinated every year or two, he might even have become the martyr he expected to be, but, unfortunately for him, his own was not one of these.

Dr. Folsom* very aptly says, "His shooting of the President was, to a certain extent, the logical result of bad training, character somewhat unscrupulous, enormous self-conceit, self-will, disappointment in not getting office, cowardice, extreme political partisanship, delusions or deceit regarding religion, desperation of poverty, expectation of personal gain, love of notoriety, and hope of praise from the 'stalwarts,'"—but are these necessarily expressions of insanity?

While I do not agree with an English criticism that "Guiteau is a type of American civilization," I do believe that in a new country as large and great as ours, a land in which religious and political liberty is as universal as it is in this, and in which the creed that "one man is as good as another" has so many believers, there must be many Guiteaus; not Guiteaus who necessarily kill a president, but eccentric individuals with "badly arranged minds." In many sections of the country there are religious sects and communities whose teachings are as immoral and unstable as that of the establishment at Oneida, from which the assassin graduated. In the section in which the elder Guiteau lived I understand that a large number of people, even to-day, hold that with careful bodily care life may be prolonged indefinitely; but the counsel for the prisoner inadvertently proved, in alluding to the elder Guiteau's views on this subject, as an element of his insanity, that he nevertheless made a will and insured his life. In Massachusetts there is a body of "Second Adventists," many of whom, I understand, fully approved at the time the crime of Freeman, who sacrificed his child; and in other parts of the country there are colonies of equally ignorant and fanatical people, whose teachings and practices are calculated to stimulate the baser emotions of the ignorant, and send them adrift to prey upon society, with the most loose views both religious and ethical.

Guiteau's behavior subsequent to his conviction is too well known to be recalled, and his appearance upon the gallows was fully in consonance with his previous life. He was a hardened yet weak wretch, and the same spirit which led him during the trial to express his vanity and allude to the attention of certain

* *Boston Medical and Surgical Journal*, February 16, 1882, page 151.

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"ladies" prompted the verses and the sickening "last words" upon the scaffold. Such scenes are by no means novel, and the murderer's parting speech in other cases where insanity is not hinted at, is, as a rule, a mixture of cant and blasphemy. Only a few weeks after Guiteau's hanging a negro murderer in St. Louis cried out as the trap was sprung: "I'm going to the 'Lordy' like Charlie Guiteau." (See Appendix D.)

Is this moral depravity necessarily insanity? I am sure not. It is not *folie raisonante*, because the man's weaknesses were many—he was consistently bad, and his false premises were those adopted by the thousand of miserable inmates of our States prisons and penitentaries.

Dr. Mayo * in a valuable article thus alluded to persons of this class:

"Doubtless these symptoms, wavering between eccentricity and insanity, but combined with vicious propensities, are often received into an asylum, when a prison would be more appropriate. I was told lately by Mr. Pownall, chairman, I think, of the Brentford Quarter Sessions, the following anecdote respecting Oxford, who afterwards attempted the Queen's life. Sometime before that act he was brought before Mr. Pownall and another magistrate, on account of some very eccentric cruelty shown towards some fowls; and for this offense let off with a reprimand. Seeing Mr. Pownall some time afterwards, when in the penal wards of Bedlam—'Had you,' said Oxford to that gentleman—'had you punished me when I was brought before you for that former offense, I should not now have been here.'

"In this point of view the case of the Hon. Mr. Tuchet was probably a sad instance of mismanagement, both legal and educational. Mr. Tuchet wantonly shot the marker in a shooting gallery. Before this event, while this young gentleman was on the town in a state of progressively increasing discontent and *ennui*, if the eye of science had been brought to bear upon him, the observer might have possibly seen good reason for calculating upon his exhausting his powers of self-control so far as to acquire good grounds for claiming the protection of the law, before he had rendered his claim to that protection questionable or inappropriate by an act which, at that stage of abnormal conduct, assumed all the frightful character of murder. It is difficult without more knowledge than we possess of the antecedents of this gentleman to substantiate

* The Journal of Psychological Medicine. April 1867.

completely our hypothesis, but it may be plausibly suggested that he was protected by the decision of a court of justice from punishment for a great crime on the plea of insanity, instead of being prevented from committing that or similar crimes by early surveillance and detention. Meanwhile the punishment which he escaped was *legally* deserved, as he unquestionably well knew the murderous nature of the act which he committed at the moment of commission."

Genius and Insanity.—Lack of steadiness and concentration, effervescent genius, hobby-riding and crotchety versatility are the mental traits of many of these unbalanced persons of weak mind, and we find in the ranks many of the reformers who occasionally startle the world, and keep society alternating between discomfort on one hand, and the enjoyment of the ridiculous on the other ; as well as the fools who delight in keeping themselves prominent in the press and elsewhere.

Examination of the Patient.—The medical man should carefully investigate the patient's condition. He should determine by questions directed to draw out the alleged lunatic what his relations towards and opinions of his family are, and whether he believes himself the subject of persecution or conspiracy. He should note whether the patient is preoccupied, or excitable and communicative ; whether he is incoherent or violent ; whether he lacks concentration and betrays a loss of memory. Skillful questions directed to show the business relation and capacity of the patient should be put, and the religious tendencies or changes should be inquired into. Alterations in dress, personal untidiness or disregard of the bodily wants often exist and should be noted. Besides the specimens of handwriting should be examined and compared with letters written in health.

The physical changes if any, are to be looked for. The presence of paralytic obliteration of the facial folds, the deviation of the tongue, the shriveled ear of chronic insanity, unequal dilatation of the pupils, the dryness or scurfyness of the skin under the hair, and the posture and method of gesticulation are common in insanity. Speech disturbances, whether ataxic or aphasic, are valuable signs of insanity dependent upon degenerative disease of the brain, and often are confirmatory symptoms.

Tardieu's Formula.—Tardieu lays down the following formula for examination :

A. Mental state.—Three orders of facts should be investigated. 1. The intellectual troubles. 2. The perversion of the affective faculties and the instincts 3. Alteration of the sensorial functions.

The intellectual disorders consist in a general derangement, marked by delirious conceptions with complete abolition of judgment, memory and conscience ; afterwards commonly in a partial derangement of understanding. From a medico-legal point of view the most direct and immediate result of the disorder of the intellectual faculties is a perversion of will and a resulting impairment in action, either in an absence of control or purpose, or in action which bears the impress of incoherent or erroneous ideas.

Disorder of the affective faculties are constant in insanity. There is more or less alteration of affections and instincts. The more natural sentiments are abolished or perverted, and the instinct is sometimes abolished as well.

The sensorial troubles are singular and characteristic in insanity and hallucinations and illusions are the most important.

* * * * * * *

B. Somatic state. The position, attitude, walk, gestures, the dress, malformation of head, physiognomy, expression. * * * * The circulation and temperature are diminished in the inaction of melancholia, and increased in the agitation of mania. The general sensibility is exalted or perverted in monomania, or diminished to the point of analgesia in lypemania. The spasms, the startings, the muscular twitchings, the partial paralyses of sensation and motion, indicate a grave alteration of the nervous centers. The embarrassment of speech, the unequal dilatation of the pupils, the permanent deviation of the uvula, the ataxia of movement, suggest general paresis ; finally we are to recognize all the symptoms which are connected more or less directly with mental alienation. Vertigo, muscæ volitantes, cutaneous and neuropathic manifestations. The mobility of the tongue, and scars which may be indicative of epilepsy, or traces of cicatrices which may be the result of attempted suicide.

Physical Tests.—We should make careful examination with instruments of precision. The ophthalmoscope should be employed. The condition of the tendon-reflex should be ascertained, and various tests should be brought into play to

determine the possible evidences of organic nervous disease. The patient's family history; previous habits, vicious or otherwise; the progress of his disease and its complications are to be gone into.

Duties of the Medical Expert.—Whether in civil or criminal cases we are to determine the influences that may destroy the responsibility of an individual, and it should always be borne in mind that the offices of the physician are only those in which he is warranted in forming an opinion relative to the enfeeblement of mind through disease. Questions of law do not concern him, and the courts will not permit him to express more than what he knows regarding the medical aspects of the case. He should always remember the dignity of his calling and never lose his temper, no matter how much galled he may be by the impertinence of the opposing counsel, who is not always a gentleman. He should however never be flurried, never give hurried answers, and should demand time for his full answer if "choked off" or interrupted. He should, on the other hand, never show an eagerness to testify, or an enthusiasm in espousing the cause of the side upon which he may be employed. His testimony should be given in a cool, impartial manner. He should be on the alert and avoid the possibility of being trapped by his ingenious legal opponent. A favorite method of some lawyers is to dissect a hypothetical question and demand answers to isolated portions. By this means it is possible to get a truthful negative answer to many of the elements of real insanity. "Do you consider the fact that a man is slovenly in his habits an infallible sign of insanity?" may be asked, and the witness of course answers, "no"—while this very untidiness taken with other indications, may be a very important element of the mental disease. The medical man should therefore be on his guard and refuse in such a case to give any thing but a qualified answer.

Tricks of Counsel.—All manner of dodges may be resorted to, as asking the witness for example, if he has read such and such authorities, while in reality no such works are in existence. He should avoid being drawn into discussions upon various other subjects which are foreign to the case in hand, and if these be not strictly medical, the witness may refuse to answer—at least so far as he may be made to pose as an expert in some other field. In *one case* I was asked in reference to my views upon theological subjects and this I refused to go into

except in the most superficial way. It is unwise to pose either as a radical, or as a person of more than ordinary ability, and therefore do not tincture your answers with any thing extraneous. A man who declares himself an agnostic is apt to injure his case, and render himself ridiculous. So, too, he is not warranted in ventilating any extreme views or theories that do not bear the stamp of proof. The flippant witness is sure to injure his case by trying to raise a laugh or by an attempt at repartee. He will find to his cost that some sober old lawyer on the other side is quietly listening and awaiting his chance to turn the laugh upon the unfortunate jester, and to create in the minds of the jury a prejudice which is extremely uncomplimentary, as well as injurious to the case. In fact a thoughtless answer may destroy the weight of all the sound testimony that may have been given before.

Medical witnesses are very often asked whether insanity can exist without disease of the brain and the assumption is tl at it can. While it behooves the medical man to be exceedingly cautious, he may safely say that although our instruments of research do not always reveal to us the signs of disease after death, there can be no doubt but that insanity is always due to some *organic* change. So far we cannot with great positiveness recognize distinctive appearances, yet the majority of chronic cases at least are attended by well marked changes. It cannot be denied on the other hand that extensive disease of the brain may exist without any marked intellectual disturbance. (*See Post-Mortem Examination of the Insane.*)

Legal Terms.—There are various terms used in the law which should be borne in mind, not because they are always consistent with medical facts, but for the reason that the medical witness may answer more intelligently with the possession of such knowledge,—and here another word of caution may be given to those who are inclined to wander into the fields of a profession to which they do not belong. The medical man called to the stand should confine himself to insanity as a disease, and should avoid the floundering which must follow when he uses legal terms, and attempts legal distinctions.

Illusions are sensory perversions and have for their creation some outside suggestion. Real things are distorted. An individual looks at a post and sees two, or at the pictures upon the wall and declares that the figures move. He mistakes shadow for substance. He considers the whistling of the wind to be that of men in the street, or believes that the contact of his

clothing with the skin is that produced by ants or other insects. The tricks of the magician or clairvoyant are examples of illusion, and our senses deceive us every day in a variety of ways. When the illusion is persistent and incontrovertible, and when connected with various errors in reasoning capacity, it becomes an indication of mental unsoundness.

Hallucinations are perverted perceptions without material bases, and like delusions may be *simple* or *insane*. Through disease of the organs of sense or receptive apparatus distorted impressions are conveyed to the ideational centers. If the individual is able to correct them then they will have no significance, but if he does not appreciate their false character, and if he elaborates false ideas the case is different. If the patient says that he hears voices which say horrible things to him, or sees purely imaginary personages, the symptom has a dangerous significance. The individual who believes he sees the Almighty and proceeds to detail a conversation he has had with him, has an insane hallucination connected with a delusion. The insane character of the hallucination is further increased by its association with mental perversion of other kinds. Insane people frequently hear voices speaking through walls, waste pipes and imaginary telephones, and it is not uncommon to find a patient in a fixed expectant attitude listening to some fancied communication.

Brierre de Boismont in speaking of hallucinations in connection with insanity, says :—

"Out of 178 persons who presented this complication, 30 —under the influence of false sensations—threatened death, struck, overturned, wounded their pretended enemies, attempted to kill themselves, and if deplorable accidents did not take place, it was simply because they were promptly placed under restraint. Hallucinatory perceptions and illusions of hearing lead to quarrels, to extreme anger and fury, and to violence in considerable proportions. One of our patients, to whom insulting words were addressed, flew each time into a violent rage ; he exclaimed that there had been enough of it, and that he must kill somebody. This patient is all the more dangerous because his attacks are instantaneous. Were he not constantly accompanied by his servant, some accident would have occurred ; yet despite his excitement, he knows what he is doing.

"However strict may be the surveillance, these auditory illusions constantly occasion struggles between the insane, and more or less serious injuries. A merchant used to hear two voices ; one polite, the other insulting. With the former he

was amiable, cheerful, ready to oblige; but when it was the turn of the latter, he became formidable—his strength, already great, was doubled. During one of his crises he seized in an instant a stake, and he had to be surrounded before it could be taken from him. Life is often endangered by these kinds of illusions. Two ladies unexpectedly flew at a female employed in the establishment, and attempted to murder her; a vigorous struggle became necessary. A patient, insulted by these voices threw himself out of the window. We attended once a merchant in whose ears the word *bankruptcy* continually resounded. He energetically protested against this insult, and would have committed suicide had not precautions been taken.

"Accusations of theft, of abused confidence, of perjury, and voices addressed to the victims of hallucinations have frequently led to avowals from them. 'It is true' they admit. I have to add fresh facts to those we have published to prove that remorse may be a determinating cause of madness and hallucination. A tradesman who until then had deserved the esteem of all who knew him, heard voices reproaching him for a bad action. These voices left him no moment of repose, though his family and friends were prodigal of consolation. I was called in and tried to tranquillize him; every thing denoted impending madness. He went up-stairs to go to bed. A few minutes afterwards he was found hung.

"A clerk, about thirty years of age, was brought eighteen years ago to my establishment in the Rue Nueve St. Geneviève. It was suspected that he was simulating insanity. The house in which he was employed had discovered an embezzlement of about twelve thousand francs, respecting which he could not or would not give any information. Three hours after his arrival he threw into the fire a set of chimney ornaments. I asked him what had induced him to commit such a foolish action; he was some time before replying to me; then he said in a low voice and in a mysterious manner, 'He commanded me to do it.' From that moment it was impossible to get a word out of him, and he ended by falling into a state of complete insanity."

Disorderly Conduct Explained by Hallucinations.—The police reports from time to time contain accounts of arrests for disorderly conduct, and sometimes there is no explanation for the violent acts of the prisoner. Occasionally he is "committed for medical examination," but more often he is hurried off to the workhouse or penitentiary and perhaps pro-

nounced "drunk and disorderly," while in truth this disturbance of the public peace may be entirely due to the existence of hallucination. Brierre de Boismont* says: "This false sensation leads to desperate consequences. A person, a prey to this delusion, flew at a friend, whom he took for a thief, knocked him down, thrashed him soundly, and called him a scoundrel. In our establishments patients are often seen who try to beat other inmates whom they consider enemies. We attended a maniac who, believing himself surrounded by malignant beings, continually wished to rip up his companions. Many of those confided to us had struck policemen and others because they had assumed the form of enemies; for the same reason some lunatics beat their keepers and severely wound them. One had his face mutilated by a decanter; when assistance came he was blinded by blood and could not defend himself."

Delusions are *simple* or *insane*. A false belief, which is not tenaciously adhered to when proper negative evidence is produced, is a simple delusion and need not be a mark of insanity. But when the individual believes in something which originates and exists only in his own disordered imagination, and which he will not permit to be controverted by indubitable evidence, this may be said to be an *insane delusion*. A person may simply display bad judgment in the formation of opinion; or he may believe that he has committed the "unpardonable sin," or that he is the object of a vile and well arranged conspiracy, or that he has changed his identity. If, when confronted with contradictory proof, he still persists in clinging to his delusion, and especially if he acts upon it to the detriment of himself or some one else, he may fairly be considered insane.

Delusion of this last kind is clearly evidence of mental unsoundness. In legal matters the relation of the delusion is however the real issue. If such a delusion prevents the individual from exerting a "rational act of volition," which for instance is pertinent to the disposal of his property, then he does not possess testamentary capacity, and is so far of unsound mind. Such a delusion may arise in relation to his family, and he may through disease entertain a bitter hatred for persons who are entitled to gratitude and consideration. Delusions which lead to acts of violence are also equally of importance, and more than one writer upon medical jurisprudence has held that "all insanity was manifested in morbid

* Journal of Psychological Medicine, vol. ix.

beliefs, and that consequently delusion was a good test of insanity." The question of responsibility, however, depends upon the connection of the act with the particular delusion.

It is the province of the medical man to study the relation of delusion with other evidence of insanity, with change in habits, morals, and the many perversions that go to make up the picture of mental disease.

Delusions not Necessarily Expressed in Conversation.—Delusions need not necessarily be expressed in actual words but the insane person may suggest for instance his belief that he is some one else by his manner, behavior or dress. He may strut about wearing upon his breast decorations that he has constructed from bits of bright metal and rags, or he may personify a member of the Trinity. The possessor of a delusion is usually restless and absorbed only in himself. The expression of the face, the manner of speaking and a thousand and one little actions betray the extstence of a delusion or series of delusions. (See Appendix E)

Concealed Delusions.—The insane are often cunning to a degree it is difficult to imagine. I have known of many cases in which the patient who appeared in court under writ of habeas corpus made so good an appearance and under skillful coaching refrained from expressing the delusion that would disclose his insanity to the jury that he has been discharged, and every Superintendent of an asylum has had cases of this kind.

In well marked cases of insanity of advanced stages, the evidence of the disease cannot be restrained, but in the masked intellectual forms it is possible for the lunatic to resort to ingenious reasoning. This form of mental perversion is known as

Reasoning Mania, *manie raisonnante* (the manie sans dèlire de Pinel) (*See Reasoning Insanity*) has been applied to a form of insanity in which the intellectual faculties are less affected than the others, and many of the so-called cases of moral insanity are those in which false conclusions are reached and as a result of the deprivation of judgment and the false exercise of will the patient may commit some act of violence which is almost incredible, because the ordinary mental condition of the individual seems to be unaffected. The plans laid by such people, the pretexts used to justify the crime, and the means used, all appear at first sight to stamp him as a responsible being, but usually there are striking mental inconsistencies which indicate insanity

The patient's troubles always begin with change in temper and disposition. He grows quarrelsome, disorderly and violent. The will of such subjects is enfeebled and they are inconsistent and act from impulse. Sexual desire is expressed in attempts at rape or bestiality, jealousy by sudden assaults, and the individual is dominated by his passions.

Dagonet,* in speaking of the subjects of *manie raisonnante*, says that a prolonged and attentive examination of the insane of this class will impress the observer with the fact that the intellectual vigor of the patients is more apparent than real. In fact, the patients reason logically in a given circle, but when the conversation is prolonged or when other subjects foreign to their ordinary line of thought are introduced, they will not be slow in manifesting fixed ideas, strange illusions, errors in perception, false appreciations, exaggerated conceit and a variety of other indications of a morbid mental condition. I recently examined a patient, with Dr. Clymer, who suffered from this form of mental trouble. He freely admitted that his insane acts were the result of reasoning, and that during the night he would bring himself to believe in the propriety of making certain purchases, or doing things he afterwards regretted. Upon one occasion he walked down Broadway and purchased several umbrellas and other things he was already provided with. He had spent a considerable sum of money in a few weeks, and when we saw him, had begun to seriously consider the performance of acts more harmful to himself and society.

Lucid Intervals.—In some of the common forms of insanity there are remissions in the course of the disease, during which the patient is apparently sane. These periods must not be confounded with the temporary remissions which occur in mania for instance, but we do find them notably in general paresis of the insane. Legally defined, a lucid interval consists of a period during which the patient regains the power of using his judgment in the management of affairs. It is, however, questionable whether an established form of insanity ever has remissions during which the patient is entirely sane. Mania has remissions of short duration during which the individual may impress the bystanders with his apparent capacity, but medical men hesitate, and justly so, to admit that such a thing as a genuine lucid interval exists. It cannot be denied that some

* Nouveau traité elementaire et pratique des maladies mentales, etc., H. Dagonet, Paris, 1876, p. 203.

particular illusion disappears, which removes, perhaps, the bias of the patient's judgment regarding a specific act. There are cases of mental disease of a recurrent form which are characterized by periods during which the patient may, with some intelligence, conduct his affairs or preserve his relations with society in a creditable manner but a smoldering fire exists which is likely to break out when least expected.

The law recognizes the right of the individual during the so-called lucid interval to make a will, sign an obligation, or exercise his civil rights. He is held responsible for crimes committed during such a period, so the rule works both ways, and by no means with perfect equity.

The plaintiff in a suit against a lunatic who is supposed to have a lucid interval is required to substantiate the fact that the individual was sane when he signed a particular deed or contract. Under these circumstances the nature of the written contract, its possible amendation and correction by the alleged lunatic, should be examined, and the facts bearing upon the matter in hand should be brought out. Upon the part of the defendant, it can be usually shown by his friends and legal advisers, that such a lucid interval is only a partial remission.

Contracts made by the Insane.—The determination of the mental condition of individuals in relation to the validity of contracts they may enter into, or wills they may make, is frequently necessary. Insanity is always a convenient excuse for those who find themselves bound by distasteful bargains, or a plea presented by disappointed relations who have not what they consider their due, when the estate of an inconsiderate testator is divided. A large number of the cases in the Surrogate's Court are contested because of the alleged mental incompetency of the dead man, and testimony is given which is often indicative of any thing else but mental feeblness. Eccentricity of conduct and dress and peculiarities of language are brought to light and dignified as insane symptoms, and the skeleton of many a closet is laid out in the court room. It may be safely stated that two-thirds of all the suits brought to set aside wills are based upon the flimsiest ground work.

The capacity to make a will need be, according to the law, dependent upon a very ordinary state of mental integrity. The will of an insane man who may, even with the existence of conspicuous mental defects, be able to recognize the objects of his bounty and have sufficient intellectual vigor to appreciate the

extent of his property, and dispose of it properly, is frequently admitted to probate.

Testamentary Capacity.—We are to investigate the condition of the testator at the time he makes his will, and decide whether his disposing capacity is affected in any way—either by the natural decay of old age, by senile dementia or other kinds of insanity—or whether there exists a delusion which prevents him from intelligently disposing of his holdings.

Wills made *in extremis* usually have no value in the eyes of the law, and these as well as contracts are often contested.

Tardieu, Laségue * and other French writers have extensively written upon the mental condition of the individual during the last moments of life. They announce their belief that either as a result of general disease or insanity the brain is always affected just before death, and intelligence obscured to some extent, so that the capacity for will making is at least doubtful.

Old Age and Dementia.—Much has been said about the distinction between the mental decay of simple old age and the appearance of senile dementia, and it is important to make the distinction when we are called upon to testify. Dr. Ray says, "This form of the disorder, or senile dementia, is so often the subject of medico-legal inquiries, especially in connection with wills, that it deserves particular attention. Senile dementia, it must be recollected, is something more than the mere loss of mental power which results from the natural decay of the faculties; it is not only feeble but it is deranged. Were it not so every old man would labor under a certain degree of dementia." Senile dementia, as Prichard has written, is not the lot of old persons universally, though it is a condition to which old age has a tendency, and to which the last stage of bodily decay approximates.

Extreme old age sometimes prevents the testator from knowing the objects of his bounty and from intelligently disposing of his estate. If his mind is so weak, either through disease or old age that he may be tricked or swindled; if his memory and perception are so blunted as to prevent him from knowing the extent or condition of his property or the persons to whom he wishes to give it, then true doubts arise in regard to his competency. Simple old age does not necessarily bring with it incapacity, for there are men who have attained very great age

* Etude de la folie, p. 126.

without any suspicion of mental unsoundness arising. In the Watson case, an old man of 86 was held to be competent to make a will, and cases are on record of wills made at ninety or over which stood. The law that "if a man in his old age becomes a very child again in his understanding, and is become so forgetful that he knows not his own name, he is then no more fit to make a testament than a natural fool, a child or a lunatic." (Browne).

In the case of Harwood *vs.* Baker in which a will was made in favor of a second wife to the exclusion of the testator's family, the testator being in a condition of mental feebleness from disease, the charge of Erskine was to this effect.

"Their lordships are of opinion that in order to constitute a sound disposing mind, a testator must not only be able to understand that he has by his will given the whole of his property to one object of his regard, but he must also have capacity to comprehend the extent of his property and the nature of the claims of others whom by his will he is excluding from all participation in that property, and that the protection of the law is in no cases more needed than it is in those where the mind has been too much enfeebled to comprehend more objects than one, and more especially where that object may be so forced upon the attention of the invalid as to shut out all others that might require consideration."

The Test of a Disposing Mind.—With regard to the proof of a disposing mind an English Judge (Brett) said "that it was not sufficient for the testator to understand merely that he was making a will, but they (the jury) had to say whether at the time the will was made, the testator had sufficient intelligence to understand substantially the state of his family and of his affairs, and the disposition of his property as made by the will, and if he had sufficient power of mind to intend to make such disposition."

CASE I.—ALLEGED IMPAIRMENT BY REASON OF OLD AGE—WILL SUSTAINED.—Matter of Lucy H. Eddy, 32 N. J., Eq., 701.

Lucy H. Eddy died in Rahway, in 1879. She was a daughter of the late Thomas Eddy, of New York, who was distinguished for his public spirit and philanthropy, and inherited from him his strong mental qualities and convictions of duty. She left a will dated Jan. 15, 1875, and a codicil dated Sept. 5, 1876. This will was contested in the Prerogative Court, on the

ground of lack of testamentary capacity. Deceased was 83 years old at the time she executed the will, and none of the witnesses for contestants testified that deceased was of unsound mind, but only averred to the weakness of memory regarding recent occurrences, which might be expected in a person of such advanced age, and some would not even say that she was unfit to make a will. On the other hand it was shown that she read the classics and histories, and would excite admiration by her able discussion of them ; that she seemed to remember old events ; she answered questions intelligently ; knew what she was doing ; that she knew who her relations were ; that she used an old will as the basis of her will of 1875 and made all the necessary memoranda thereon herself.

Another point advanced by contestants was the confidence reposed by deceased in her attorneys, and her indifference to the fact that much more money had been expended on the building of a house for her than was at first contemplated, and it was claimed that this was evidence of the want of that capacity requisite to the making of a will, but it was held that this merely amounted to natural confidence in capable business men. Held also, that mere forgetfulness of recent events is no evidence of incapacity to make a will.

The will was therefore admitted to probate.

Testamentary capacity is destroyed then by actual weakness of mind, as well as by insane delusion ; or by any thing that will weaken the individual's memory and judgment and volition in relation to the disposal of his property, or the objects of his bounty. So far as the delusions do not interfere with the actual disposition of the property it has been held that this will may be valid. Such was the ruling of Cockburn in the case of Banks vs. Goodfellow.

"No doubt when the fact that the testator had been subject to any insane delusion is established, a will should be regarded with great distrust, and every presumption should in the first instance be made against it. When insane delusions have once been shown to have existed, it may be difficult to say whether the mental disorder may not possibly have extended beyond the particular form or instance in which it has manifested itself. It may be equally difficult to say how far the delusion may not have influenced the testator in the particular disposal of his property, and the presumption against a will made under such circumstances become additionally strong when the will is, to use the term of the civilian an insufficient one, that is to say, one in which natural affection and the claims of near relation-

ship have been disregarded. But when in the result, the jury are satisfied that the delusions have not affected the general faculties of the mind and can have no effect upon the will, we see no sufficient reason why the testator should be held to have lost his right to make a will, or why a will made under such circumstances should not be upheld."

The celebrated Jumel will case was one in which the question of delusion arose. Madame Jumel died some years ago leaving a large and valuable estate to different religious and charitable institutions, cutting off her family. It was shown that the testatrix, who was a very old woman when the will was made, was peculiar and crotchety, and that she labored under the delusion, among others, that she was the victim of a plot—that her relatives had attempted to poison her, and so deep-seated was her belief that she refused all food until she procured it herself. The case was tried in the Supreme Court of New York in 1866, and the Court took the position that if she was insane because of these delusions, she was incompetent to make a will.

A case not so clear as the above is referred to by Dr. Lee in an able paper. Such examples are very common in the courts, but it frequently transpires that the original hatred of the testator is well founded.

"George Moore, of Kentucky, made his will in April, 1822, and shortly afterward died. The validity of the will was disputed on the ground of unsoundness of mind in the testator. It was shown that, about twenty-four years before his death he had a dangerous fever, during which he contracted a strong hatred against his brothers, who he imagined intended to injure or destroy him, although they had attended him through his illness, and never gave any cause for his suspicion. This antipathy continued until the day of his death, with a single exception, when he made a will in their favor, which he subsequently canceled. The Court, in its decision, said: 'that he cannot be accounted a free agent in making his will, so far as his relatives are concerned, although free as to the rest of the world. But, however free he may have been as to other objects, the conclusion is irresistible that the peculiar defect of intellect did influence his acts in making his will, and for this cause it ought not to be sustained.'"—(Little's Reports, 371).

CASE II.—GENERAL COMPETENCY, WITH THE EXISTENCE OF A DELUSION IN REGARD TO SON—WILL NOT ADMITTED TO PROBATE.

Merrill *vs.* Rolston, } 5 Redfield, 220.

(Will of Caroline A. Merrill.)

Deceased made a will in 1856, bequeathing all her property to G., her adopted son, in reversion. G. subsequently married against the wishes of deceased, which led to an estrangement between them, and deceased thereafter manifested an intense hatred for him; mutilated her will and his portrait, and in various other ways manifested her displeasure; made vulgar charges against himself and his wife; and subsequently (in 1871) made the present will in which she ignored G.

Upward of 20 different witnesses testified to the rational conduct, intelligence and conversation of deceased. She traveled from place to place, crossing the ocean, paid her own bills, kept a diary of her travels and books of account, wrote various letters evincing judgment, coherence and discretion, and showing no evidence of mental weakness.

Held, that while no reasonable doubt arose of her general capacity to execute the will, the instrument propounded should be refused probate because it was executed by decedent when laboring under an *insane delusion*, the same being the direct offspring of such delusion. See Miller *vs.* White, 5 Redfield, 320.

CASE III.—ALTERATION OF WILL UNDER INFLUENCE OF DELUSION—CODICIL REFUSED PROBATE.

Miller *vs* White, } 5 Redfield, 320.

(Will of Anna M. White.)

Testatrix executed a will in 1877, containing a legacy to a niece. In 1878 her mind began to fail. She became untidy, mean, vulgar, averse to company, abusive and suspicious. She conceived a great dislike for her niece, and frequently accused her of dishonesty. She also had delusions, believing that she saw persons who were dead or not present. In March, 1878,

she executed a codicil to her will revoking the legacies to her niece.

Held, that while the testatrix may not have been of unsound mind she was the victim of an insane delusion at the time of making the codicil, and that the codicil must be refused probate.

CASE IV.—IMBECILITY—WILL NOT ADMITTED TO PROBATE.

Townsend *vs.* Bogart, } 5 Redfield, 93.

(Will of Mary E. Hatfield.)

Testatrix could not read or write although she attended school for three years; could not count more than ten; could not tell time by clock; could not recall any ordinary event in her life; could not comprehend value of money or property; would make presents of pictures cut from magazines, and old pieces of calico and silk; and was easily lost in familiar streets. She attended her own housework and was very devout and regular in her attendance at church. She had a sister in an insane asylum and was herself adjudged insane two years after making her will.

Several witnesses testified that from impressions received while conversing with deceased they believed her to be of sound mind; but beyond the circumstances attending the signing of the will no incidents of any import were adduced in support of their belief.

Held, that decedent was not of sound and disposing mind when she executed the will.

The question of so-called partial insanity arises in relation to the will of a person of whose insanity no evidence can be brought forward except the fact of a particular delusion.

Wharton and Stillé allude to the case of an eccentric old woman who made a will disinheriting her brother who she insanely believed had joined the Catholics, to whom she had a strong aversion. The decision of Lord Brougham in this case has a healthy tone not often found in these days. He expressed his disbelief in partial insanity and held that the mind was "one and indivisible, and if unsound on one subject, provided that unsoundness is at all times existing on that subject, it is quite erroneous to suppose such a mind really sound on other subjects; it is sound only in appearance."

CASE V.—EXISTING DELUSIONS NOT INTERFERING WITH CAPACITY—WILL ADMITTED TO PROBATE.

Dickie *vs.* Van Vleck, } 5 Redfield's R., 284.

(Will of Patrick Dickie.)

The testator executed the will in controversy in 1871. A few days before its execution testator called upon the attorney who drew the will, and who knew nothing of his financial or family affairs, and gave him instructions with intelligence and coherence as to its provisions. In 1874, the testator was adjudged a lunatic. It was attempted to prove by the opinions of medical experts, based upon certain *occasional* acts and delusions of the testator, that he was not of sound mind before and at the time of the execution of the will. Among the evidence relied on to support these opinions, was the testimony of a servant to whom the testator stated in 1870, "that his housekeeper was an English spy, and her numerous boxes filled with gunpowder," and that he ordered a barrel of flour sent from the basement because it contained a dead body. There was much conflicting testimony regarding the conduct of deceased, both before and after he executed the will; for while contestant's witnesses testified to various strange sayings and doings of decedent, several of proponent's witnesses with whom deceased had had frequent dealings for years, stated that they observed nothing unusual or extraordinary in his conduct during that time.

Held, that these occasional acts were not sufficient proof that the testator was of unsound mind at the time of the execution of the will.

CASE VI.—ALLEGED INSANE DELUSIONS IN REGARD TO CHILDREN—WILL ADMITTED.

Leslie *vs.* Leslie, } 15 N. Y. Weekly Digest, 56.

Testator executed a will in December, 1879, and died January 8, 1880. He bequeathed all his property to his wife, and ignored his children, who contested the will. Testator received an injury to his head twenty years before his death. Contest-

ants claimed that he had been induced to disinherit them through insane delusions; that considerable rivalry in business had existed between himself and his sons; that they had assisted in certain lawsuits against him; that testator believed from these circumstances that his sons were unfriendly to him and his interests. That testator had lost all affection for one of his sons because he refused to visit him when ill.

On the other hand it was shown that he had successfully and intelligently conducted a large business for over twenty years, and none observed in his conduct any word or act to warrant the belief that his mind was impaired.

Held, that to constitute an insane delusion, something more than an unwarranted conclusion from existing facts must be shown.

CASE VII.—ALLEGED INSANITY OF TESTATOR NOT PROVEN—FANCIED RESENTMENT NOT AMOUNTING TO INSANE DELUSION—WILL ADMITTED.

American Bible Society *vs.* Stover, } 12 N. Y. Weekly Digest, 213.

Deceased was a man of peculiar temperament, of poor health, of weak intellect, miserly, and wandering habits. He became angered toward his family because of a fancied slight, and manifested his resentment to an exaggerated degree upon every occasion. It was conceded that he was not affected with any form of general insanity.

Held, that this was not proof absolute of an insane delusion.

The Bristed will case was one in which no evidence of incompetency was proven, although testimony was adduced regarding the testator's insanity previous to the making of the will.

CASE VIII.

In Bristed *vs.* Weeks, } 5 Redfield's Surrogate's Court Repts. 529.

(Will of John J. A. Bristed.)

The testator, who died in 1880, executed a will in 1871. In February, 1873, he was examined at Paris by Dr. Blanche, who caused him to be conveyed to a lunatic asylum, where he remained under Dr. B.'s observation for a week. Dr. B. states

that in his opinion the decedent "was born under bad conditions of cerebral heredity, and had never been, even in his infancy, in a well balanced nervous condition, nor of a thoroughly sound judgment." In support of this opinion he says. "From his infancy, John J. A. Bristed was subject to nervous crises, during which he uttered cries. He was never able to fix his attention continuously. He could not remember what he learned." * * *

Another witness (Mrs. Caroline Carson), a friend of the Bristed family, testified that the decedent was naturally good natured, and she could not believe he would have been guilty of the acts of violence he had committed, if he had been in his right mind. That "as a child he seemed gentle and sweet-tempered; but as he grew older he seemed to be bereft of reason. He would shriek like a wild Indian, and rush out of the house like a madman without any cause. He would play the piano for hours by day, and then get up in the dead of night and go on playing. * * On returning home at night, instead of ringing the bell, he would throw stones at the house." She concludes: "I saw him in 1877, when he was acknowledged a lunatic. His talk was precisely the same I had always known it."

The Court says, after reviewing this testimony: "On the whole, therefore, I do not feel justified in attaching much importance to Mrs. Carson's testimony which relates to the testator's mental capacity."

Other witnesses testified that the testator was very nervous and would get into a passion about very trivial matters; also, that he was "a little forgetful at times."

With regard to the plea of hereditary insanity, the Court says: "The circumstance that certain collateral relatives of decedent, the descendants of his great-grandfather, have been afflicted with mental disease, throws little light upon the question—at what period of his life he first became its victim. Evidence that he had an hereditary tendency to insanity does not establish, of course, that such insanity was probably congenital, or that it declared itself at any particular stage of his career. And besides, the evidence does not disclose the existence of insanity among his immediate family or his lineal ancestry on either his father's or mother's side."

Held, that at the time of the execution of the will, the decedent "was of sound and disposing mind and memory."

NOTE.—Beyond the statement that some twenty witnesses stated that they saw nothing irrational in the conduct of de-

ceased at the time of his departure for Europe in 1871, there is no further reference to the testimony in support of his sanity in the report of this case. The opinion of the Surrogate seems to be based mainly on the failure of contestants to prove mental unsoundness of deceased.

I examined Mr. Bristed during the last year or two of his life, and though at the time he suffered from a light grade of chronic mania, there was no reason to believe he did not possess testamentary capacity; in fact, his will was an exceedingly just one, the principal legatee being a sister who had not fared as well as he in the original division of the property. The contestants were his step-mother and an infant half-brother.

CASE IX.—INSANITY EXTENDING OVER A LONG PERIOD, NO EVIDENCE OF DELUSIONS AFFECTING TESTAMENTARY CAPACITY—WILL DECLARED VALID.

Kingsbury *vs.* Whitaker, } 32 Louisiana Annual Reports 1055.

G. M. Bowditch died August 1, 1877, leaving a will dated June 24, 1876, bequeathing all his property to his sister, Mary Ann Fiske. He had been a successful business man and had accumulated some property, but during the late war and the corrupt administrations which followed it, he met with serious losses which, as he himself says, rendered him "irascible, sad and despondent." He became subject to violent paroxysms of rage which rendered him for the time being insane, and he was frequently confined in jail and in asylums. His relatives finally procured his confinement in an asylum in Massachusetts, from which he was released in 1874. Thereafter he manifested an intense dislike for the said relatives, particularly his brother-in-law, Rev. Mr. Dowse, whom he styled "an orthodox thief;" but it appeared that his mother was living with said Dowse and that he was paying $3.00 a week for her board, and that Dowse had demanded more as she was growing old and troublesome. It appears that when under one of his insane attacks he would gather from the streets cigar stumps and other refuse, and preserve them as valuables. His letters written between 1864 and 1877, both before and after his temporary fits of insanity, prove him to have been a man of great intelligence and learning, and a close observer of men. There was no direct proof that he was insane when he executed the will; on the contrary it is shown that he drew the will himself, and both the witnesses

who attested it say that he spoke very rationally on that occasion. There is also a letter written by him July 14, 1876, in which he speaks of the proceedings instituted to have him declared insane and of the plans he has formed to resist them. This letter is very coherent and full of sound reasoning,

On appeal, the Supreme Court declared deceased to have been sane when he executed the will.

CASE X.—ALLEGED DELUSIONS IN REGARD TO SONS, NOT PROVEN HOWEVER—WILL SUSTAINED.

(Will of Ebenezer W. Cole, 49 Wisconsin Reports 179.)

Ebenezer W. Cole executed his will January 1, 1872. He died Nov. 4, 1878 aged 78 years. He left two children, one (Elliott G.) by his first wife, and one (Rinaldo) by his second wife, from whom he was divorced in 1869, and a widow whom he married in 1870. The will which left the bulk of his property to his widow was contested by the sons on the ground of insanity. It was shown that about 1863 deceased conceived the idea that his wife was untrue and that Rinaldo was not his son. No ground for this belief was shown. In 1864 deceased and his wife separated, and in 1869 he procured a divorce under the Wisconsin statue, making five years' separation ground therefore. Deceased was in the habit of taking large quantities of morphine and chloral daily, but ceased using the chloral a few days before he executed the will, and it was claimed that his mind was seriously affected thereby. No other evidence was given to prove testator's insanity.

In sustaining the will the Supreme Court held that as there was no proof that deceased was laboring under the delusion regarding his son Rinaldo at the time of its execution, the will was valid.

CASE XI.—ALLEGED INSANITY (PROBABLY BAD TEMPER AND HYSTERIA)—WILL ADMITTED TO PROBATE.

Coit. *vs.* Patchen, } 77 N. Y. 533.

Emily Coit died in June 1875 aged 67 years. Her will was executed Aug. 1, 1874. She left real estate valued at $150,000. The will was contested on the ground that testator labored under delusions regarding her husband and some of her children; that she believed her husband had held improper rela-

tions with other women ; that she showed no affection for some of her family ; that her daughter, Mrs. Grey, was ill-treated by the rest of the family (because she had sympathized with deceased in a divorce suit between her and her husband, and had stood by her in all her domestic troubles) ; and that she (Mrs. Grey) was in danger of coming to want, that these delusions were the result of illness in 1868. It was shown that she was jealous of her husband and once struck him for looking at another woman ; that they often quarreled, and lived apart several times ; that at one time a divorce suit was pending between them. That her son had assaulted her and been convicted therefor. It was also shown that after her illness in 1868 and up to the time of her last illness she continued to manage her estate with intelligence and prudence, as she had done theretofore.

The Surrogate made a decree admitting the will to probate, and on appeal both the Supreme Court and Court of Appeals affirmed this decision.

Eccentricity in Relation to Testamentary Capacity.—Mere disproportion in the division of property or eccentricity are not necessarily evidence of testamentary incapacity, and although the law is very careful in regard to the question of undue influence, great care should be taken to distinguish between cases in which the individual defers with perfect propriety to the suggestions of intelligent and life-long friends instead of bad children who never have shown any filial respect or interest in the testator until the question of the division of property is raised. When, on the other hand, a kind father, whose relations with his children are of the pleasantest kind, becomes, during the latter years of life, morose, irritable, and shows unwarrantable dislike, neglect, with moral and intellectual weakness grave doubts arise.

Eccentricity should not be misunderstood and looked upon as disease, nor should superstitious belief, or the striking exaggeration of character of old age we sometimes find, which, however, are perfectly consistent with mental integrity. In the Bonnard will case the testator, an old man, left a large sum of money to the Society for the Prevention of Cruelty to Animals, and a clause was inserted providing for the care of certain dumb beasts. At first this was looked upon as a positive sign of mental unsoundness, but when it transpired that the aged testator was a believer in metempsychosis, the rational character of the act was manifest.

The belief in spiritualism or Swedenborgianism or any other *ism* which, perhaps, leads the testator to leave a legacy to some religious body, no matter how irregular, is not necessarily insanity and should not be so considered.

In courts of law it is often contended that because the individual wears certain loud colors and ungainly, conspicuous dress, or because he eats, or drinks, or walks, or sleeps in an unusual way, he is of unsound mind. Not only life-long peculiarities, but personal traits which may be the offspring of ignorance or vanity or even vulgarity, may sometimes be sufficient in the eyes of snobbish or ungrateful children to stamp their progenitor as of unsound mind.

CASE XII.—RELIGIOUS ECCENTRICITY—WILL ADMITTED TO PROBATE.

Hartwell *v.* McMaster, } 4 Redfield, 389.

Deceased executed his will on September 25, 1880, and died October 1, 1880, aged 72 years, leaving no children. He had been in business in New York city, had taught school, preached, and had some knowledge of electricity. On behalf of contestants it was claimed that testator lacked testamentary capacity, and it was shown that he did not believe in the doctrine of the "Real Presence" or transubstantiation, nor in the necessity of baptism in infancy. That he lived alone and locked himself in during his last illness; that he had once disturbed a religious meeting by abusing the minister; that he wished to attend a public school as a pupil; that when over 60 years old he fell in love with a girl of 12.

Held that this was not sufficient to prove that testator was insane or lacked testamentary capacity.

The question of the effects of bodily disease upon the mind is a favorite one sometimes, though several important cases have been decided adversely when such an issue has been raised. A familiar case is that of

La Bau *v.* Vanderbilt, } 3 Redfield, 384.
(Will of Cornelius Vanderbilt.)

CASE XIII.

The deceased executed his will in 1875, bequeathing most of

his property to his son Wm. H. The will was contested by his daughter, Mary A. La Bau, on the ground, among others, that deceased was not of sound mind and memory. After his death an autopsy was held and revealed the fact that deceased was afflicted with several chronic and painful diseases which most of the medical experts agreed had a tendency to affect the mind. It was testified that deceased had stated that he was the railroad king of America; he had also said that his memory was failing him; that deceased was ambitious, excitable, violent, and irritable; that his mind vacillated for some time before he made his will as to whether he would distribute his estate equally among his children as he had expressed an intention of doing years before, or whether he should bequeath it as the present will provided; he was very capricious in his likes and dislikes of his children; that he was credulous, suspicious, talkative, vain; that he contemplated a monument 100 feet higher than any other; he believed he received spiritual communications regarding the terms of his will and business affairs.

On the other hand many eminent persons who had known him for years, and transacted business with him, testified to his intelligence and good judgment down to his last illness. Regarding the autopsy, it was shown that the brain of deceased had not been examined, and it was claimed that the surmises as to the probable effect of the diseases upon the mind of deceased.

Held that there was no evidence that deceased was of unsound mind and memory.

CASE XIV.—WILL OF ALLEGED "KLEPTOMANIAC" OF ECCENTRIC HABITS NO EVIDENCE OF INSANITY—WILL SUSTAINED.

Matter of Will of James Lewis, } 33 N. J. Equity Reports, 219.

Joseph L. Lewis died in Hoboken, March 5, 1877, aged 86 years, leaving considerable property. . On October 1, 1873, he executed his will, which, after making several bequests, directed that the remainder of his estate be applied in reducing the national debt of the United States incurred during the rebellion of 1861. The attorney who drew the will stated that there was much care and consideration given to the will by the testator, he himself making the memoranda for its preparation, and that a draft of it was made and submitted to him before it was

executed ; that he was very solicitous about some stocks and bonds deposited in New York city, and wished the will drawn so that they would be disposed of by it ; that his mind was perfectly sound and his memory good. It was claimed, however, that he was a kleptomaniac ; would pilfer articles of small value ; toward the close of his life he became miserly ; used profane language ; was unclean and careless in his personal appearance. It was proven, however, that in his business transactions he was, up to the time of his death, shrewd, prudent ; that he never manifested any symptoms of an unsound mind ; was suspicious ; had an iron will ; of strong attachments ; of strong antipathies ; always made good investments.

The Prerogative Court, in admitting the will to probate, held that there was no evidence of unsound mind. His bequest to the United States was evidence of a lofty attachment and fidelity to his country—not of his disordered imagination.

CASE XV.—INCOMPETENCY TO MAKE A WILL ALLEGED TO BE DUE TO BRIGHT'S DISEASE—WILL SUSTAINED.

Mairs *vs.* Freeman, } 3 Redfield, 181.

(Will of James Mairs.)

The testator in this case had in his will mistaken the order of birth of two of his children ; had misstated his own age, and had neglected certain grandchildren in his will. He had been suffering from Bright's disease in connection with other diseases for two years previous to his death, and it was claimed that his intellect had been impaired thereby. There was no direct testimony of the mental unsoundness of deceased, but there was conflicting testimony by medical doctors as to the effect of Bright's disease, etc., on the mind.

Held, that deceased was of sound and disposing mind.

CASE XVI.—TESTAMENTARY CAPACITY ALLEGED TO BE DESTROYED BY INSANITY RESULTING FROM CANCER—WILL SUSTAINED.

Fraser *vs.* Jennison, } 42 Michigan Reports, 206.

This was a contest of the will of the late Alexander D. Fraser, of Detroit, a leading member of the Michigan bar. The will was dated May 17, 1877. The evidence showed that deceased

was over eighty years old and had been suffering for over twenty years from a cancer on the nose which ultimately consumed the flesh on one side of his face and also his eye, and from which he finally died on August 2, 1877. Prior to the winter of 1876 he had been very fond of society, had always been neat in appearance, and had always been kind and considerate to the members of his household ; but after that time he secluded himself, became slovenly, and frequently abused and assaulted the members of his household. He was eccentric in dress and at the execution of the will appeared dressed in a night-gown and Scotch cap. After the execution of the will (in May, 1877,) and up to the time of his death he frequently had delusions and raved to such an extent as to disturb his neighbors. On these facts five physicians believed him insane. On a trial before the jury a verdict was rendered sustaining the will, which verdict was, on appeal to the Supreme Court, affirmed.

CASE XVII.—WILL MADE BY LUNATIC WHEN INSANITY FOLLOWED ORGANIC DISEASE OF BRAIN.—NOT SUSTAINED. (*Was probably incompetent for some time before the will was signed.*)

(Matter of Sarah M. Blakely's Will, 48 Wis. 294.)

Sarah M. Blakely executed her will April 7, 1876, and it was contested by her husband on the ground of insanity. It appears that she had a stroke of apoplexy in December, 1875, and for some time thereafter was subject to paroxysms of grief and crying. In April following she executed the will. In the summer of 1876 she had another stroke of apoplexy, and on Sept. 26 was sent to an insane asylum, where she died March 10, 1877. In February, 1876, she wrote several clear and coherent wills. For a long period she had manifested a great dislike for her husband and entertained groundless suspicions of him. She was nervous, flighty, excitable and hysterical, discontented and unhappy. Dr. Barnett who attended her says that after the paralytic stroke in December, 1875, her mind became enfeebled and that she was suffering from dementia and did not consider her in a proper condition of mind to attend to business in the spring of 1876. Drs. Hunt and Russell testified as to her condition before the paralytic stroke, that her conduct might be the result of nervous excitement or childishness. Dr. Kempster, Superintendent of the asylum in which deceased was confined, from an examination made in Septem-

ber, 1876, believed her to have been of unsound mind in April, 1876.

The Supreme Court (on appeal) *held* that deceased was laboring under no insane delusion when she executed the will; that she did not lack testamentary capacity; and that the will was correctly admitted to probate.

CASE XVIII.—CEREBRAL DISEASE, SOFTENING, DEMENTIA, UNDUE INFLUENCE—WILL NOT SUSTAINED.

Cherbonnier *vs.* Evitts, } 56 Maryland Reports, 276.

Seth H. Evitts died September 22, 1877, aged eighty years. On August 27, 1875, he executed a will bequeathing to plaintiff all his property with the exception of a few small items. On April 2, 1876, and September 22, 1876, he made two other wills which were substantially the same as the will of 1875, the only change being in the minor bequests. These wills were severally offered for probate but rejected on the ground that testator was not of sound mind when he executed them, and the will of 1875 was probated.

On December 20, 1876, deceased executed a deed to defendants, transferring most of his real estate. His deed it is now sought to set aside on the ground of mental incapacity in the grantor.

In setting aside the deed the Maryland Court of Appeals said, in reviewing the evidence, that after the execution of the will of September, 1876, the defendants, through false statements, produced in the mind of deceased an insane delusion that plaintiff was treating him badly and robbing him of his property; that he had always been on affectionate terms with plaintiff; that there was no grounds for the delusion. That he had several strokes of apoplexy in 1876, and was permanently paralyzed; became imbecile; was childlike; had few ideas; his mind became inert; was easily controlled and influenced; his memory failed; was unable to walk without assistance and required constant attendance; his hobby was politics.

On this evidence the court held that deceased was not competent in mind when the deed was executed.

CASE XIX.—WILL—PREVIOUS HISTORY OF CEREBRAL DISEASE—IMPROPER ADMISSION OF EVIDENCE—WILL SUSTAINED ON APPEAL.

Brinkman *vs.* Reieggesick, } 71 Missouri Reports 553.

Deceased, some years previous to his death, had a sunstroke, and although he had previously been sane and rational he thereafter became imbecile and unable to read or write; did not care for money; never transacted business with any one. Shortly before his death he executed his will, which is now offered for probate. The witness to the will testified to his soundness of mind at the time it was executed. On the original trial the Circuit Court received the testimony of several witnesses as to rumors of the insanity of deceased, and rejected the will on the evidence.

On appeal the Supreme Court reversed the judgment on the ground that the Court erred in receiving hearsay testimony as to testator's incapacity.

Undue Influence.—Medical witnesses are frequently asked to express an opinion whether the patient's mental disease is not such as to make him an easy prey to designing friends and relatives, who may have ends of their own to gain, and through the agency of undue influence may lead or force the person to dispose of his property in a way he would not were he in full possession of his faculties. It is sometimes a difficult matter to give such an opinion, for although the physician may have no doubt of the mental status of the testator, he is often bound by rules of evidence to answer a badly-drawn hypothetical question which is unscientific and negative. Undue influence may be brought to bear in cases where through disease the individual is either unable to reason correctly, or where, to avoid opposition and worry, he injudiciously accepts the arrangements made by other people, or where his will power is so much impaired that he cannot resist well directed and decisive demands of interested plotters. The suspiciousness and unreasonable delusions which the insane man harbors towards those he has always loved are very often played upon by interested persons, and in certain stages of mania and melancholia as well as the first stage of dementia, it is possible to lead the insane

individual to do many unjust acts under the delusion that indignities have been heaped upon him, and that insults and slights have been offered to him. It may readily be seen how the subject of religious melancholia may be made to give all his money to the church, and instances of this kind are exceedingly common, especially when the testator is a woman who is tortured with ideas of future unrest and punishment. The majority of cases where undue influence is alleged to have been exercised are those where there is a history of dementia in old people. The senile dement is prone to make foolish and trivial disposition of his property, and particularly is this the case when he is aided by designing people who surround him, and the individual of this kind is very apt to be easily turned from his original purpose by fresh suggestions or new influences. He is liable to imposition and unjustifiable prejudice. The Carlton-Gates case, reported by Dr. Lee, is one which may be adduced as an example where a will had been made as the result of undue influence. In this case the testator was of insane temperament—"was impressionable to subtle and usually unrecognized influences," and under the dominance of a delusion which had been created by a very dear and "particular friend" he committed an act of injustice which was clearly the result of his insanity. "When it is considered that just before his last visit to Europe, Gates had made a will restoring the whole of his property to his mother, and that it remained unaltered until his weak and perverted mind had been thoroughly poisoned against her, and nearly up to the time of his death, when a new will was executed revoking his former bequests in favor of the very individual who it is proved had caused the new will to be made, and who had had sole charge of Carlton's person for the last two weeks of his life; such an instrument appears so unreasonable, so unnatural and unjust on its very face, and bears upon it such irresistible marks of intrigue, dishonesty and fraud, that it must necessarily be rejected.

"In forming a judgment in this case in regard to the state of mind of the testator," says Lee, "I also find sufficient evidence of insanity *in the nature of the will itself*. To say nothing of the strange and unnatural nature of the bequests themselves, proving conclusively the change of feeling and disposition already referred to, the confident expression of Carlton's belief in the fact of his having been *poisoned* notwithstanding the positive assurance of all his physicians that such was not the fact—the direction to have the *contents* of his stomach analyzed for the

detection of poisons, supposed to have been administered *many months before*—he being a medical man ; the appropriation of $25,000 (at first named $50,000) for the prosecution of certain suspected persons not named in his will ; the gift of the Yonkers estate to the corporation of Yonkers, although he knew he had no legal title to it and was only trustee of the property ; the false statement in regard to his father and mother, and her income, imbecility, etc., etc. ; when to all this we add the extraordinary *fear and suspicion of detection and discovery*, during the drawing and execution of the will, directing "doors to be carefully closed," and "to see that no one was about," who might possibly hear what was going on—all this so characteristic of the cunning and secrecy of the insane, proves, in connection with the other circumstances, the positive insanity of the testator. There was, undoubtedly, reason enough remaining to render him conscious that he was about doing a wrong, perverse and wicked act, for the insane are often able to distinguish between right and wrong, for, as soon as the will was executed, he exhibited no fear or suspicion whatever."

In general paresis the individual is very apt to squander his property and to fall a prey to the many parasites who are ever ready to take advantage of his *bonhommie* and boastful good nature. In a recent case the paretic whose illusions of grandeur were of the most magnificent character became involved in a variety of schemes devised by ingenious sharpers, and when legal proceedings were instituted it was found that he had gone so far as to buy for his new friends a cargo of bric-a-brac, and to secure a place for the sale of the same he had bought up the stock of the occupant of the store, spending $30.000, so that his friends might take immediate possession. In patients suffering from the first stages of the disease, it may readily be seen how any one, by judicious flattery and acquiescence in the startling projects and ideas of the individual, may wheedle him into parting with property.

In other forms of organic insanity a condition of mental feebleness akin to dementia is manifested by irresolution, irritability or intellectual torpor. It will frequently be found that disease of the cerebral vessels, especially on the left side of the brain, is very apt to be followed, if at all extensive, by degeneration of the mental faculties ; and if such degeneration is followed by an early fatal result, and a biased and unjust will is made even though there can be brought forward very few instances of mental irregularity, still we should question

the ability of the patient to withstand the arguments of interested friends.

Softening is so common after accidents of the kind mentioned above, and is so frequently symptomatized by loss of memory, indecision and childishness that intellectual competency should always be questioned.

CASE XX.—UNDUE INFLUENCE—WILL NOT ADMITTED TO PROBATE.

Greenwood *vs.* Cline, } 7 Oregon Reports, 17.

On October 12, 1872, Mrs. Elizabeth Greenwood, then 62 years old, executed her will. She died August 9, 1875, leaving an estate worth $26,000. By the terms of her will she bequeathed to two of her children, Eliza Smith and William Greenwood (the contestants) $100 each and the residue of her estate to Olive Newsome, a granddaughter and Mrs. Mary Cline her remaining child. The will was contested on the ground that the testator was of weak mind at the time it was executed and unduly influenced. It was not claimed, however, that she was incapable of executing the will but that she was laboring under a delusion with regard to contestants brought about by the undue influence exercised upon her weak and impaired mind by Mrs. Cline and Mrs Newsome. Upon the trial of the issues in the County Court the will was rejected, the court holding that while deceased had testamentary capacity the will was executed under undue influence. On appeal to the Circuit Court this judgment was reversed and contestants then appealed to the Supreme Court who reversed the judgment of the Circuit Court and rejected the will, on the same ground taken by the County Court, and also sustained the claim of contestants that deceased was laboring under a delusion regarding them at the time she executed the will. The evidence which is voluminous shows that deceased had a severe attack of paralysis in 1866 from the effects of which she never recovered; that her memory became defective; she could not tell who was working for her; would lease a piece of land and forget it next day, would ask the same question repeatedly. Two medical doctors who had known deceased testified that she was very despondent; was different from the majority of people; at times exhibited mental obliquity; her mental powers were im-

paired. Others testified her eyes had a dead expression ; she sometimes acted like an intoxicated person ; in 1872 she was peculiar in her conversation ; would stop short while making a remark and fail to finish it ; was absent minded ; while ill she imitated with empty hands the action of a person breaking a piece of quartz and examining for gold ; she very readily gave up her opinions and would side with any body who disputed them ; that while going from Salem to Howell's Prairie alone, she became turned around in the road and was coming back to Salem without knowing it ; that she did not appear cheerful or laugh ; paid no attention to her housework ; she was frequently told that her mind was not right. That on the day she executed her will she submitted herself to a short examination by two doctors from whom she obtained a certificate of her sound mind and competency to make a will. That Mrs. Cline by means of a pretended communication from her deceased husband obtained through a spiritual medium, stating that her son John W. was a rough character and would squander her property and that she should get it all out of his hands, produced a delusion in her mind regarding the character of her son. There was some evidence on behalf of proponents regarding the sanity of deceased but as this was admitted it is not necessary to give a *resumé* of the evidence.

The will was rejected on the ground of undue influence ; that it was the offspring of a delusion regarding the contestants. (See Appendix F.)

Undue Influence in Relation to Crime.—Undue influence directed to make another an accomplice in crime is rare. Imbeciles are sometimes persuaded to do acts of violence at the instance of designing persons. The risks are too great and the danger of discovery too probable, and we rarely find that the pressure of influence is brought to bear as it is in civil cases. A case of this kind where the individual confessed his crime under the dominion of an hallucination is that of Lecouffe. Lecouffe, a young man, aged twenty-four years, accused of robbing and murdering an old woman, was brought before the Court of Assizes, Dec. 11, 1853, condemned to death and executed. In the opinions of those who knew him he had always been an imbecile. His mother, notoriously immoral, had entire control over him. He accused her of instigating him to the commission of the crime, and so great was her ascendency over him that he was not at all times able to sustain this charge in her presence. He had some matrimonial projects, and his

mother taking advantage of his imbecility had bribed his acquiescence in the perpetration of the crime; and she had besides appropriated almost exclusively the proceeds of the theft, since, out of the sum of two hundred and fifty francs, she gave him only forty.

Lecouffe at first denied the charges, but finally made a full confession. This change appears to have been very singularly produced. The day after the murder, the ghost of his father had appeared before him, commanding him to tell the truth; and he had heard the voice of God promise his pardon on this condition.

In prison the jailors were surprised at his mental weakness, and his incoherent and puerile language. They witnessed several returns of convulsive attacks, at the end of which a prey to hallucinations, he uttered dismal cries. These paroxysms occurring during the trial, did not prevent the prosecuting attorney from inferring the absence of insanity; and he could only perceive in the false perceptions of the accused the remorse of a guilty conscience.

In explaining these several particulars, Georget has skillfully shown the fallacy of the premises on which the verdict was rendered. To him, the early date of his disease, and the frequency of his attacks, his uniform stupidity, his abject submission to his mother's will, the strange phenomena observed in prison, and which were probably not unusual to him, were all so many proofs that the condemned did not possess full freedom of will; and with insufficient moral perceptions, a nature weak and uneducated, he was fatally predisposed to serve as a ready instrument to any foreign suggestions or to his own bad passions. Brierre de Boismont in commenting upon the above case says: "I admit that the mere finding that this patient had obeyed an obvious selfish interest, dissented from the conclusions of Georget, but we have seen that the intention which governed the act does not necessarily imply the possession of an independent volition. Hence the elements of the case upon which Georget rests his view are such as to attach us to his opinion."

The Medico-legal Relations of Aphasia.—The question of *apoplectiform* attacks in connection with *aphasia* arises frequently in cases in which the testamentary capacity of an individual is questioned. The occurrence of general arterial degeneration with its attendant accidents, is one which very often invalidates the patient's capacity to know the objects of his

bounty and dispose of his property in a sagacious manner. The first indication of cerebral mischief may be tendency to attacks of cerebral congestion with irritability of temper, forgetfulness, a disposition to burst into tears and a condition of excitement, succeeded by very marked intellectual disorder amounting to dementia. There may be attacks of hemiplegia, and they usually closely succeed each other. In connection with these there may be a condition of *asemasia* (aphasia), which gives rise to speech defects as well as inability to communicate by writing. The question of aphasia suggests several points. (1). Whether the condition be such as to prevent the individual from communicating to others the ideas he intends to express. (2). Whether his affection of intellect is such as to prevent him from recognizing the mistakes he may make in talking and writing.

Aphasia with Responsibility.—In the determination of the importance of aphasia as a symptom in any particular case, we must discover whether or no it is connected with insanity. In a will case in which I was recently called to testify, the patient had an attack of right hemiplegia with aphasia. She had always been a person of weak mind and her mental degeneration deepened towards the later years of her life. A peculiarity of her aphasia, which was complete, was that she reversed "yes" for "no," and then her state of intellect was such as to prevent her from realizing her mistake. Dr. Bancroft* reports the case of a farmer who was aphasic and insane. He could read printed or written words, could see the figures upon dominoes, but could not understand spoken words and he denied being able to read. He was unable to understand that he was speaking incorrectly. This very point is one that has medico-legal importance. The sane aphasic is usually apt to realize his mistakes and either attempt to correct them or express annoyance. The insane aphasic makes no such attempts and his mental condition is not indicative of the fact that he retains cognizance of his error.

Case XXI.—One of the most celebrated cases is that of Delafield *vs.* Parish. The following report is to be found in Wharton & Stillé's Medical Jurisprudence and is an abstract from a very interesting account of the case published in the American *Journal of Insanity* (Oct. 1862): The alleged loss

* *Boston Medical & Surgical Journal,* Vol. civ No. 21 p. 483.

of understanding on the part of Mr. Parish was as usual dependent upon physical disease. He had threatenings of cerebral disturbance for several years before his attack of apoplexy and paralysis in 1849, and had hereditary tendency to disorders of that nature. The shock of this final attack rendered him insensible and convulsive for several hours.

It was soon discovered that his right side was paralyzed. His physicians characterized the seizure as "hemiplegia" leading to "defect of motion not of sensation," and implicating "the right arm and right leg, and also the organs of speech." He subsequently acquired a slight control over the right leg, but the arm, which improved somewhat after the first six months immediately after the attack, afterwards entirely lost its power. The left arm and leg were not permanently affected by paralysis.

It is stated that Mr. Parish recovered, in a considerable degree his strength after the first shock, and that during the remaining seven years of his life he enjoyed good, but not uninterrupted, health. He suffered from a severe and painful disease of the bowels, in Oct. 1849; subsequently, he had a number of attacks, "distinct from the general disease, but the most frequent dependent upon its cause, or, in other words, dependent upon the condition of the brain which led to the disease."

"He had one or more severe attacks of cholera morbus, one or more of inflammation of the lungs, an abscess formed at one time under the jaw, which became so large as to threaten suffocation, and there were several minor attacks from time to time."

In addition to these disorders, ever after his apoplectic attack, Mr. Parish was subject, at regular intervals, to spasms or convulsions, the intervals extending from one or two weeks to six months, and even a year. Their approach was preceded by despondency and irritability on the part of the paralytic, and after the convulsion had passed off, he was generally better and brighter than he had seemed before. The convulsions are described as commonly coming on suddenly with a noise in the throat resembling a shriek or scream, a violent reddening of the face, and a convulsion of the whole body—the muscles becoming alternately rigid and relaxed. Some of these paroxysms were so violent as seriously to threaten a fatal result. It was the opinion of Mr. Parish's attendant physician that they were "connected with the condition of the brain left by the apoplectic attack." The main feature of Mr.

Parish's final illness was congestion of the lungs, but it was a complicated disease depending, also, in the opinion of his physicians, upon the condition of the brain.

His power of speech was mainly abrogated on his first attack and from that time to his death he was never able to utter any thing except a few imperfectly articulated monosyllables. These were principally "yes" and "no," which he pronounced very imperfectly, and there is even great doubt whether he ever uttered them intelligibly.

He expressed himself most frequently by the use of unarticulated sounds. These are described by witnesses as sounds resembling the syllables, "yah, yah, yah," "nyeh," "nin, nin," "yeah, yeah, yeah," and others of a similar character.

He accompanied these sounds by gestures and motions of the left hand and arm, and by nodding or shaking his head. The gestures usually consisted in his waving his hand in different directions with his fingers extended, putting his fingers in his mouth, or raising his hand and shaking it. The external senses, feeling, hearing and smelling, do not appear to have been seriously affected. His eyesight was always more or less imperfect.

He would occasionally look at books and papers, but the preponderating evidence was that he could not read at all. An attempt was made to induce him to write with his left hand, but after several trials with paper, slate and blackboard, which in one or two instances, resulted in his writing after a copy the first few letters of his name in very doubtful characters, the attempt was abandoned.

Block letters were procured, but he could not use them, and pushed them away. A dictionary was suggested, but whether the trial was ever made or not, he never adopted that method of communicating his ideas. It was the constant practice of Mr. Parish's nurses, in accordance with his wife's directions, to read the newspaper to him, but the proponents failed to prove that he ever manifested comprehension of what was thus communicated, or exhibited any intelligent interest in the reading.

Subsequent to the attack he was never entrusted with the management of his own affairs, nor allowed to have money in his possession. He could not supply his own wants, and was washed, dressed, and attended at table like a child, and was even frequently unable to control his evacuations.

His wishes, as might be expected, were not easily ascertained. He expressed, by inarticulate sounds and motions before re-

ferred to, that he desired something, and various suggestions would be made by those attending him until he expressed assent, though it often happened that it was utterly impossible to comprehend him, and the attempt would be abandoned by both parties. He would also assent to contradictory suggestions.

Before his attack, Mr. Parish is described by his relatives and acquaintances as a "placid and unexcitable man," of great self-respect and with great command of temper; "his manners were mild, gentle and unruffled;" a quiet undemonstrative gentleman, rarely exhibiting any emotion, and deeply absorbed in his commercial transactions.

After his attack he manifested a marked change of disposition; he occasionally shed tears; and, in several instances, exhibited a want of appreciation of the requirements of decorum, and even of decency. He had, occasionally, uncanny freaks and caprices, such as searching for his clothes in impossible places, going out to see the moon, and making excursions to the garret and the cellar, for no ascertained purpose; and it sometimes became necessary to use physical force to prevent him from undertakings which threatened his personal safety.

He exhibited some recollection of his former daily and familiar places of resort, and of his former habits of business, which he would attempt, in trifling matters, to resume, as, by pulling out his watch when he passed the City Hall clock, or insisting, when driven out, upon being taken to the Bank of which he was once a Director, or to his old office, or to various tradesmen with whom he had been in the habit of dealing. In addition to these, the proponents, who contended that Mr. Parish's intellect was never materially impaired, brought forward many particular instances in which it was claimed that he manifested undiminished intelligence. One or two of these may be mentioned.

It was said by one witness: "Having been riding out of the city, he would take his watch out of his pocket, look at it, turn round and look at me, when I would ask him if he wished to return, if it was late or about his usual drive; he would say 'yes' and nod his head." Elsewhere, the same witness says: "I recollect, on one occasion, the dining-room clock was run down; when he pointed at the clock, I perceived that it had stopped; remarked to him that it had stopped, and I would wind it up, when he nodded his head." An old acquaintance testified that he recalled to Mr. Parish a ridiculous circumstance that had happened to them in company, many years before, and

that Mr. Parish "gave him to understand that he recollected the circumstance, and laughed at it quite heartily." These instances, however, of which the above are specimens, were isolated, and taken together were not deemed of sufficient significance to avoid the conclusion derived from the facts before stated.

In regard to the actual execution of the codicils, it seemed that the counsel employed to prepare them read them to Mr. Parish in the presence of the subscribing witnesses, put to him the requisite formal questions, and received from him by sound and gesture, as usual, what were supposed to be affirmative replies. The counsel then assisted Mr. Parish by guiding his hand while he made his mark. At least this was the case at the execution of the first and second codicils; there was no evidence whether or not he received assistance in making his mark at the execution of the third.

Such were the main points of the case presented to the Court of Appeals. The opinion of the Court was delivered by Judge Davies, from which we quote the comments upon the facts which we have narrated, and the conclusions, in which the majority of the Court concurred.

After adverting to the change in Mr. Parish's disposition after his attack, Judge Davies, says: "How diametrically opposite to the previous conduct of his whole life is that now exhibited. And the inquiry forces itself upon the mind, What cause has produced such results? Can such totally inconsistent and opposite characters be reconciled with the theory that the faculties, the mind, and moral perceptions of Mr. Parish underwent no change, but were the same after July 19, 1849, as they were before that day? * * We confess ourselves totally unable to assent to any such theory. The conviction on our mind is clear that these facts and circumstances show unerringly that the attack of July 19th obliterated the mental powers, the moral perceptions, the refined and gentle susceptibilities, of Henry Parish; that after that period he ceased to be the mild, intelligent, and unruffled man he had been theretofore, and that thereafter he was not responsible for the unbecoming and ungentlemanly conduct he so frequently exhibited. He then ceased to be Henry Parish, and was no longer an accountable being." Upon the point of Mr. Parish's method of communicating his ideas, Judge Davies says: "With these imperfect mediums for ascertaining the thoughts of Mr. Parish, it is doing no injustice to any one to assume that they have been mistaken when they supposed that they correctly

understood him. We more naturally and readily come to this result, because we find that all who had any intercourse with Mr. Parish, on many occasions, found great difficulty in understanding his wishes and thoughts, if they even understood them at all; and the instances are frequent and clearly established where he often made an affirmative and negative motion of his head, immediately succeeding each other, to the same question, leaving the inquirer in perplexity which he really intended.

* * * * * * *

"All the testimony shows that he could only indicate with his fingers and hands, or by sounds, that he wanted something, or that something was the matter, and which motions or sounds were construed by those around him as evidences of his wish to put a question, whereupon they began to suggest various topics, and when they thought they perceived that they had hit upon the subject in his mind they supposed he wished to inquire about, they put such questions as suggested themselves to them, and to which they supposed they had received affirmative or negative answers. If Mr. Parish had no power to express a wish to destroy a will, it follows he had none to create one, and the manifestation of his wishes depended entirely upon the interpreter and the integrity of the interpretations.

"It is thus seen that great difficulty and uncertainty, to say the least of it, attended any expression of the thoughts or wishes of Mr. Parish, and that a large number of those having business or intercourse with him, utterly failed to attach or obtain any meaning to his signs, sounds, motions, or gestures. The natural and obvious deductions to be made from all these facts and circumstances are, that Mr. Parish had no ideas to communicate, or if he had any, that the means of doing so, with certainty and beyond cavil and doubt, were denied to him."

After referring to the testator's failure to communicate by writing, or by the use of any artificial means, Judge Davies states the final conclusions as follows:

"To what result does this review of the facts and circumstances in this case, adverted to and commented on, lead the mind? On a careful consideration of them all, with a most anxious desire to arrive at a just and correct conclusion, we are clearly of the opinion that the attack of Mr. Parish on the 19th of July, 1849, extinguished his intellectual powers, so obliterated and blotted out his mental faculties, that after that period he was not a man of sound mind and memory within the mean-

ing and language of the statute, and was therefore incompetent to make a will. * * * * * *

"It is not the duty of the Court to strain after probate, and especially to seek to establish a posterior will, made in conceded enfeebled health, unsustained by previous declaration of intention, over a prior will, made in health, and with care and deliberation, when the provisions of the posterior will are in direct hostility and conflict with those of the prior one.

* * * * * * *

"It would be in violation of long and well established principles, and an almost uniform and unbroken current of decision in England and in this country, to admit to probate testamentary papers, prepared and executed under the circumstances these were by a man who was in apparent full physical health, and possessing nearly his natural strength, who could not or would not write, who could not or would not speak, who could not or would not use the letters of the alphabet or even a dictionary, for the purpose of conveying his wishes, upon proof solely that they were supposed to express the testator's wishes from signs, gestures and motions made by him, and especially when it appeared that such signs, gestures and motions were often contradictory, uncertain, frequently misunderstood, and often not comprehended at all."

Dr. Hughes* of St. Louis, in a paper upon the medico-legal bearings of aphasia, takes as his text the case of Wm. T. Bevin vs. Powoll et al. In this case the patient's family considered him insane at the time of making a deed of trust, but it appears from the evidence that such was not the case and his aphasia was not such as to prevent him from expressing himself in other ways.

Case XXII.—"On the 13th day of March, 1873, Mr. Wm. T. Bevin, a few months after the death of his wife, was stricken with right hemiplegia, and aphasia. A cardiac valvular lesion preceded the paralysis and is still persistent. At the time of my last examination, February 7, 1876, I found his respirations, without discoverable pulmonary lesion, to be twenty-one per minute, and the heart and wrist pulsations asynchronous, the latter counting as high as one hundred and eight, and the former sometimes ten to eighteen more, per minute. At this

* American Journal of Insanity, January, 1879.

time there was incomplete paralysis of motion on the right side and general anæsthesia. He was insensible to the pricking of a pin in both hands and feet. The sublingual temperature, on either side was 96° F. He correctly and promptly comprehended oral signs, but tardily and imperfectly understood written ones. He soon recognized my name and wrote it for me, with his left hand. He likewise wrote his own name and the surname of his attorney (Mr. Rainey), upon my asking them. An H, written by myself, and an imperfectly erased tracing of my surname, were on the card on which he wrote my name. He first attempted to attach "ughes" to the H I had written, but afterwards changed his mind and made an H of his own, which accounts for the somewhat disjointed appearance of the word Hughes;

His tongue was clear, but he said he always had a disagreeable taste in his mouth. He either really had, or feigned, defective vision. When the thumb was held up before him, looking with one eye, the other being blind-folded, he would say it was two, and when the thumb and little finger were held up, he would say they were three. I intended making an ophthalmoscopic examination, but before I had an opportunity the case came on trial, and my testimony not being satisfactory to the family, I did not offer to examine him further. He either had defect of hearing in the left ear, or feigned it. I could not certainly determine which. He signed that he could not hear the ticking of a watch half an inch from his ear, yet he distinctly understood a remark addressed to him by his sister in quite an ordinary tone, at least twelve feet off from him, at the time I was testing his hearing. None of the family spoke to him in a very high tone, as is customary when one is deaf. He repeated the word *nin-nin*, accompanied by a nod of the head, to signify yes and by a horizontal turning to indicate no. When I wrote W. T. Bevin and asked if that was his name, he shook his head and taking the pencil wrote Wm. T. Bevin: He had three paralytic strokes, and was seen by his relatives after each attack. He has grown steadily better, and they now regard him as perfectly rational, but considered him unsound of mind on the fifteenth day of July, 1873, four months after his

first seizure, when he signed with his left hand a deed of trust of his portion of some houses he was building jointly with some other parties, and in fulfillment of a promise and purpose, made and entertained prior to his attack. He could not write with his left hand before he was stricken. About the time of, and prior to the signing of this deed of trust, he is said, by some of the members of his family—principally his two sisters and a brother-in-law with whom he lived and is now living—to have done some things which they swore they regarded as evidences of insanity, such as on *one or two occasions* (none of the witnesses testifying to more) bowing to pictures in the parlor, when he knew members of the family were present, and with a pleased but silly smile on his countenance. Once he is said to have wiped his nose on his napkin, and once or twice, in the early stage of his paralysis, they say he spat on his plate. Once he unbuttoned his drawers when his sister and another lady were in the room. It was said that once, shortly after his first stroke of paralysis, he defecated in bed. Once, he is said to have struck his mother with a stick, though one of his brothers, who swore there would have been no suit if he had got his three per cent. commission, as promised, for taking his afflicted brother's place in conducting the work, never saw or heard of his bowing to pictures, striking his mother, or unbuttoning his drawers.

"Some time in the June following the stroke of paralysis, he recognized and pointed at the picture of the crucifixion, and other objects when asked to point them out. At this time he could not, the family say—all but one brother—distinguish letters or tell if they were upside down or not, but readily recognized them if their names were called. As early as the first of May, 1873, he could sit in a chair and get about the room. In June he appeared to one of his physicians to be silly, "because he smiled peculiarly" and was exceedingly violent and irritable when the battery was applied. To another of his physicians he appeared demented, though he was able to go unaccompanied in the following November, a long distance to this physician's office, correctly select and count his money and pay his medical bill, and take and put away carefully a receipt for the same. It was said also that he made grimaces before a glass once or twice, and pulled out his hair, and he ate things, when set before him, that he never ate before. He handled his food with his fingers (he could not use a knife and fork), and his manners and tastes at table were changed in some other respects, he having been formerly very fastidious and precise."

"When he first learned to write his name he would make signs to visitors for a slate, write his name for them, and express his pleasure at the accomplishment by a peculiar smile. After the description of his property, mentioned in the deed of trust, was read to him, he pointed in the direction of it and gave an assenting nod, pointing immediately after in the direction of other property not alluded to in the document, and indicating his understanding that it was not included, by the usual turning away of the head indicative of dissent.

"He was attended by different physicians during the first attack. The physician who first saw him at the time of his first seizure found him only partially paralyzed on the right side, with consciousness still remaining, and helped him home. In six hours after this physician saw him he was hemiplegic and unconscious, and so remained for several days. He commenced to improve in two or three weeks. He was then annoyed by movements about the room and exhibited 'not much, but some signs, of intelligence in his countenance.' He made signs and efforts to convey ideas, and would mumble unintelligibly in answer to questions and had difficulty of deglutition. He never, at any time, had *delirium, delusion or hallucination.*"

CASE XXIII.

A recent case of some interest, where the question of aphasia arose among others, is that of—

Legg *vs.* Meyer, } 5 Redfield's Reports, 628.

(Will of Ephraim P. Meyer.)

The testator instructed one J. K. Merritt to prepare a codicil to his will and gave him written memoranda for such codicil. Shortly afterwards he was smitten with apoplexy, resulting in paralysis of mind and body, and lost his power of speech. He subsequently recovered and although he was never able to talk again he became able to read the Bible and daily papers. A few weeks after his recovery he executed the codicil and its probate was contested on the ground that testator did not have testamentary capacity at the time of its execution.

The court held that although the codicil differed in a few respects from the memoranda made by deceased before his illness, yet such memoranda was sufficient proof of his *intention* to alter the provisions of his will. That although his mind and faculties were enfeebled by his illness, he had sufficient mind to comprehend the nature of the codicil.

Another case is reported by Lucas Champonniere illustrating the fact that aphasia may exist with slight intellectual perversion, not sufficient in itself to destroy the patient's capacity to dispose of his property or make judicious contracts. I have already referred to this case in another work, where the subject of aphasia is more thoroughly considered.*

"The question was raised in this particular instance *apropos* of a case in which the patient, in spite of an enfeebled intelligence, had become capable of writing with the other hand. He could not, however, write if left to himself, and could only recopy what was written and set before him, and the expert physicians vainly tried to make him recopy a power of attorney or a will, while he willingly wrote any ordinary phrase or document which did not bind him to any thing. This man, then, knew perfectly what he was doing, and the Société de Medécine Légale concluded that he possessed still thorough intelligence and free will to be able to continue to enjoy his civil rights, the intellectual debility which he had suffered not appearing to be sufficient to justify what the French laws call an 'interdiction.'" †

The Handwriting of the Insane.—The handwriting of the insane, as presented in contracts, wills or other documents, or in their letters, often shows singular evidences of the disordered state of mind of the writer. Not only are we to look for insane peculiarities in the literary style of the person, but the substance of the letter itself is often an index of irresponsibility and incompetency.

The chirography is often illegible because of omissions and interlineations. The page may be so "cross-hatched" with lines as to be all but undecipherable. Many words are substituted or transposed, and there may be scrawls and diagrams which are meaningless. The handwriting of the general paralytic is perhaps the most interesting, and it is well to compare a series of letters, some written during undoubted mental health and others at different stages of the disease. In the latter it will be found that letters are omitted or imperfectly formed, or later that the peculiar delusions of the writer are reproduced.

Business Contracts.—In contracts which are questioned because of the alleged insanity of one of the parties it is neces-

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* Nervous Diseases, their Description, etc.; 2d. Ed., p 197.

† British Medical Journal, September 15, 1877.

sary to examine not only the individual but the instrument. If it is discovered, in addition to the insanity of the contracting party, that the bargain is clearly disadvantageous to him, the question of fraud and imposition is raised. It sometimes happens, on the other hand, that the question of mental unsoundness is agitated when it is the aim of a person to shirk a responsibility. In a recent case in which I appeared, the question of melancholia was urged, and it was averred that the plaintiff had made a contract under the impression that his business was in a ruinous condition, and that this was a delusion resulting from melancholia. In this case I was unable to find any characteristic intellectual derangement, but only simple emotional disturbance of a depressing character. I found that his view of the state of his affairs was perfectly in accordance with the real facts; that the contract was dictated by him and contained pertinent marginal corrections and interlineations; that his letters, written at the time, were intelligent, and that his motives in bringing the suit were to upset a bargain that did not bring him subsequently what he considered to be his proper share of the business he conducted with the contracting parties. We must take cognizance of the fact in such cases as this, as well as others, that no question of the insanity existed at the time of the alleged imposition; that usually the friends of the person do not consider it necessary to seek legal advice, and it is not necessary to resort to an asylum or other means of protection. Casper relates a case of interest in this connection:

"In a civil process the accused merchant, W., asserted that from his ailing condition he was unable to prepare a statement of his affairs and to confirm it by an oath. I had to satisfy myself in regard to this, and at the same time to give an opinion whether he could be arrested personally, if necessary. The investigation proved that W. certainly labored under the well-known disease called hypochondria, which in itself could be regarded as a mere simulation, though it could not be denied that the manifold ailments alleged to exist were either intentionally or unintentionally exaggerated. 'Granting, however,' I said, 'that W. is ill, nevertheless, since he is not feverish nor confined to bed and is of clear intellect, it is not easy to see why such an employment as the one in question, the preparation of a statement of his affairs in his own apartments, should be impossible for him or likely to be injurious. When he alleges that the mere addition of sums causes him anguish, such a statement is to be rejected as inconsistent with medical ex-

perience. Only if he were to be forced and hurried in the performance of such a work could there be a possibility of injury resulting.' Accordingly I declared that W. was in a fit condition to prepare a statement of his affairs and to confirm it by oath, provided a few weeks were granted to him for this purpose, and that if necessary he might be personally arrested. This opinion was communicated to W. and a statement of his affairs was very speedily thereafter handed in."

The following case relates to the validity of a promissory note drawn by a person who shortly afterwards became insane :

CASE XXIV.

Stigers *v.* Brent, } 50 Md., 214.

On July 1, 1874, and November 1, 1874 John J. Brosius executed two promissory notes. Suit was brought upon them in November, 1876, and judgment obtained February 12, 1877. On March 10, 1877, it was judicially declared in a proceeding *de lunatico inquirendo* that Brosius was a lunatic and had been since August 1, 1875. It was conceded that Brosius was of sound mind at the time he executed the notes, but it was claimed that he was a lunatic at the time suit was brought. The Circuit Court for Washington County held that Brosius was liable, and on appeal to the Supreme Court of Maryland this judgment was affirmed.

CASE XXV.—DEED MADE BY AN ALLEGED LUNATIC DECLARED VOID.

Turner *v.* Rusk, } 53 Maryland Reports, 65.

William L. Rusk, who had previously been successful in business in the City of Baltimore, and was remarkable for his energy and industry and shrewdness, was, on April 19, 1861, suddenly thrown into a condition of intense excitement, caused, it was believed, by the military preparations and excitements of those times. He remained in this condition for some time and was removed to the residence of his sister, and finally, in the latter part of May, was admitted to have been insane. His disease was declared to be a case of general brain trouble caused by the financial excitement, etc., of that period. On December 27, 1862, while residing with his sister, he executed a deed

for a nominal consideration of property valued at upwards of $10,000 to Robert Turner in trust for his mother who was then 75 years old, and after her death absolutely to his sister. He left his sister's in 1864 and lived with his mother until 1875 when she died, and after her death the *cestui qui trust* claimed the property named in the deed. He then brought suit to have the deed set aside on the ground that he was not mentally capable of making a valid deed at the time it was executed, and the deed was declared void. It was shown that although the property stood assessed in his name that no mention of the transfer had ever been made to him, and he claimed to have no recollection. It was also proved that he was incapable of transacting business at the time of the execution of the deed, and that he had not completely recovered from the effects of his attack in 1861 until several years thereafter.

On appeal to the Court of Appeals the judgment declaring the deed void was affirmed.

CASE XXVI.—CONTRACT ALLEGED TO HAVE BEEN MADE BY AN INSANE PERSON—CONTRACT SUSTAINED.

Kneedler's Appeal. 92 Penna. State Repts., 428.

Solomon A. Kneedler through his counsel, on August 18, 1876, borrowed $5,000, giving as security a mortgage on property in the City of Philadelphia. This money he used to pay off a mortgage on some other property. He was afterwards, on March 2, 1877, adjudged to have been insane at the time of this transaction, and subsequently, the mortgage having meantime been foreclosed and judgment rendered thereon, by default, he began these proceedings to have the judgment opened in order that he might plead his insanity as a defense, but the Court dismissed the proceedings. On appeal to the Supreme Court the dismissal was affirmed, the Court saying that though Kneedler was insane at the time he executed the mortgage, it was undoubtedly a sane act. He did so through advice of counsel, and applied the proceeds to a judicious purpose.

The Question of Dissolution of Partnership by Reason of Insanity.—In the matter of business associations, especially when the interest of one member is monied, and that of the other is the experience and "brains" he brings, lawsuits may arise and attempts at dissolution growing out of the insanity of one member of the firm and the consequent danger that mutual interests may be wrecked. The sane party may de-

mand an inquisition upon proof of the insanity of the other so that the co-partnership may be dissolved.

Impeachment by Reason of Insanity.—In the matter of guardianship, where the trust funds are being squandered, or where the protection of the ward demand it, steps may be taken for the deposition of the guardian. The most painful cases are those where the medical man is required to testify as to the incapacity from old age or mental disease of an officer holding a position of public trust. It cannot be denied that even learned judges whose long and honorable service has resulted in mental decay are able in a routine way to go through with familiar duties of the past, and in fact those mental operations which become automatic are apt to fail long after minor perversions have attracted the attention of his immediate friends and family. In such cases the office of the medical man is a disagreeable one, and he should act with more than ordinary care and prudence. No blow is so great as that inflicted upon a sensitive and high-minded person when he is made certain of his intellectual failure. The symptoms of ordinary disease or temporary manifestations of overwork should never form the basis for a hastily expressed opinion.

Marriage and Insanity.—It sometimes happens that an attempt is made to invalidate a *marriage*, one of the contracting parties being insane at the time. It may be that the person in whose aid the power of the courts may be exercised is at the time of marriage a declared lunatic, in which case all that is required is a showing of the finding of a previous commission. More often the contracting party is one of weak mind who has been entrapped by designing persons. The same influences that may have been brought into play to make him link himself with some prostitute or adventuress may be brought to bear to make him an earnest defendant when his family bring action to set aside the marriage.

In such a case he is amply provided with friends and advice who supply the brains he unfortunately does not possess. It will be readily seen that the sexual perversion inseparable from various forms of insanity may lead to a union perhaps with some one far beneath the patient, and the influence of nymphomania leads to impulsive acts which the person, who perhaps is an hysterical girl, does not stop to consider. The celebrated English case of Miss Bagster is an example of this kind. "Miss Bagster was proved by the evidence to be a frivolous and weak minded girl whose education

had been much neglected. She was a lady of fortune, and she ran away with and was married to a Mr. Newton. An application was made by her family to dissolve the marriage on the ground that she was of unsound mind. Amongst other facts urged before the commission as proof of the allegation it was mentioned that she was occasionally violent and self-willed, that she was passionate as a child, and that even in maturer years she had little or no self-control. That she was ignorant of arithmetic, and therefore incapable of taking care of her property. That she had some erotic tendencies which were evinced by her want of womanly delicacy and by her having engaged herself with a view to marriage to several individuals. On her examination before the commissioners her answers were intelligent, and her conduct in no way different from that of ordinary individuals. Seven medical witnesses were summoned to support the commission, and each of them deposed that she was unsound mind. The commissioners, however, had recourse to Drs. Morrison and Haslam, who visited her and who came to the conclusion that she was neither imbecile nor idiotic, and that her inability to manage her affairs arose from ignorance. She was aware of her deficiencies, and deplored her ignorance of arithmetic, and explained it on the ground that her grandfather had been too ready to send excuses for idleness when she was at school. Her conversation greatly impressed Drs. Haslam and Morrison with a belief in her sanity. The jury by a majority of twenty to two returned a verdict that Miss Bagster had been of unsound mind since November, 1830, and the marriage was consequently dissolved."

Breach of Promise and Insanity.—Breach of promise cases are often defended upon the plea of insanity and irresponsibility. In the case of Harford vs. Singleton it was claimed that the defendant's softening of the brain and insanity were cogent reasons for his non-fulfillment of the marriage contract, which plea, however, was unsuccessful.

Case XXVII.—Harford vs. Singleton.—This action was defended on the ground that at the time defendant had promised marriage he was advanced in life—viz., 60 years of age; and that before a reasonable time had elapsed from the request to marry, namely, in May, 1855, he was, by a visitation of God, attacked by a fit of apoplexy, since which time he was in an infirm state and afflicted with softening of the brain, in con-

sequence of which he could not perform his promise without putting his life in great peril, and hastening his death.

Evidence was called, on the part of the plaintiff, to prove the engagement and to show that no apparent impairment of health or vigor remained after recovery from the attack.

It was stated by defendant's counsel, Mr. Ball, that in 1849 he had suffered from dropsy and disease of the kidneys; that, in 1852, he had an attack of apoplexy and congestion of the brain. During the interval from that time until May last he had promised to marry the plaintiff; but that in the latter month he was afflicted with another attack of apoplexy, and was now suffering from paralysis and softening of the brain. The defense then called several medical men who had attended the defendant. They testified that he had had apoplexy and was paralytic, was suffering from loss of memory and other mental symptoms, and that he was liable to another attack, and that any excitement would increase the tendency to such attack, but would not say that he might not marry without imperiling his life.

The jury returned a verdict for the plaintiff £300 damages and costs. The ground of this verdict, it is said, was that the jury considered that an unreasonable time had elapsed between the date of the promise of marriage and the date of the last attack of apoplexy.

Marriages contracted *in extremis* are usually very apt to be dissolved by courts of law. Tidy refers to the case of Rochefort, who was married to his former mistress on her death-bed, he being taken from prison for the purpose. It appeared that the woman was in her right mind, and consequently it was held to be valid. But where one of the parties is over-awed, or there is any evidence of mental perversion, the legality of the contract is questioned.

The seduction of an insane or irresponsible person is punishable, but sometimes the questions involved are extremely difcult to decide. The case of the People *vs.* Royal is one of some importance, although the theory of the prosecution is perhaps not in accordance with the soundest psychological doctrines.

CASE XXVIII.—RAPE—ALLEGED IRRESPONSIBILITY OF VICTIM—CONVICTION OF PRISONER—VERDICT SET ASIDE ON TECHNICALITY.

People *vs.* Royal, } 53 California R., 62.

Defendant, who was a practicing physician in Santa Rosa,

was tried and convicted of rape committed on a girl 16 years of age. Defendant drove in a buggy to the house where the girl lived and invited her to go home with him. (She was in the habit of visiting his wife). She assented, and on the way defendant practiced "manipulation" on her. Upon arriving at his office he accompanied her up-stairs and had carnal intercourse with her. There was no evidence of force, but it was claimed that his manipulation had destroyed her will and therefore rendered him as guilty of rape as if he had used force. The girl testified that defendant's lewd conduct during the drive made her so dull and stupid as to be unconscious of the act he was performing. The conviction was made on the theory that defendant's manipulations were equivalent to force.

On behalf of defendant it was claimed that defendant's manipulations did not amount to force, and that he could not therefore be convicted of rape, and, on appeal to the Supreme Court of California this conviction was set aside on these grounds.

The following case is one where damages were obtained for alleged mental disease as the result of seduction. This, like others of its kind, is of an exceedingly questionable character. the defendant being held by the law responsible for much more than that of which he is guilty.

CASE XXIX.

Blagge *vs.* Ilsley, } 127 Mass. Reports, 191.

In a suit for damages for injuries resulting from seduction, where it was shown that previous to such seduction the girl had been strong and well and of gay and cheerful spirits; and that after her seduction she became nervous and excitable; and as no pregnancy or sexual disease was proven, a verdict was rendered for plaintiff, and, on appeal to the Supreme Court of Massachusetts, it was held that this evidence was sufficient to warrant the verdict.

Divorce and Insanity.—The plea of insanity is often urged as a ground of divorce, and in one case of which I know the husband of an insane woman whose disease developed after marriage, brought suit for separation. In ordinary cases such inhumanity in disregarding the existence of the affection as an unfortunate calamity for which the patient is no more responsible than she would be for smallpox or typhoid fever, rarely finds favor in the eyes of the law; but it can be

realized that in instances where insanity has existed before marriage, and when the husband or wife has been kept in ignorance of the fact by the patient, or by his or her parents or near relatives, a delicate legal point may arise.

Case XXX.—Puerperal insanity as the basis of irresponsibility is rarely advanced in civil cases. In fact, I know of but one case, that of Lady Mordaunt. This was the famous divorce case in which a Prince of England figured as a witness. Lady Mordaunt, after her confinement, admitted that she had committed adultery before the birth of her child, and the evidence substantiating her story was seemingly very strong, for entries in her diary a year before recorded the visits of a nobleman at an hour of the night inconsistent with the strictest propriety. This occurred two hundred and eighty days before the birth of her child. It appeared from the testimony of servants and others that there had been no signs of any thing peculiar in the conduct of Lady Mordaunt either before or after the birth of her child, and this was in contradiction of those friends, of the patient herself, who asserted that her confession was the result of a delusion; for not only had the wife admitted improper relations with other men, but swore that the child was not her husband's. The patient was delivered of her child on the twenty-eighth of February, 1869, and a week or two later made her extraordinary admission. The physicians called by the plaintiff were inclined to think that she was not insane, and that there was nothing in her conduct inconsistent with feigning. The reasons assigned as evidences of her insanity were of the most extraordinary description, but they were met with much that was contradictory. It was shown that her habits had become filthy, that she destroyed her clothing and was unclean in her habits; and in 1870 she was demented, and could not comprehend communications that were made to her. The jury and the judge took this latter view of the case, and it was decided that as early as the thirtieth of April the respondent had not sufficient capacity to bring the suit, and had been unfit ever since. The charge of the judge to the jury was, that he did not ask them to say whether Lady Mordaunt was sane or insane, but simply to decide "whether she was or not in such a state of mental disorder as to prevent her giving instructions." The case was afterwards appealed and tried upon its merits, the matter of insanity being left out of the question, the defendant being considered guilty of adultery, and the divorce was granted. Woodman and Tidy, in commenting upon this

case, say : "It is thus seen that insanity is no bar to a decree of divorce, a principle which seems to us far from being a safe one. In a case of murder, the evidence of other persons or circumstantial evidence may be sufficient. In the relations of husband and wife, it seems hard to punish the wife while she is unable to defend herself. At all events, if the principle be admitted, it seems unjust that a poor laborer should have to pay towards the support of an insane wife in Colney Hatch or Hanwell, and be liable to a prosecution for bigamy if he marries again, whilst the wealthy baronet escapes almost scot free and may marry again if he choose."

CASE XXXI.—ACTION FOR DIVORCE UPON PLEA OF INSANITY, AND FAILURE OF DEFENDANT TO SUPPORT PLAINTIFF—DENIED.

Baker *vs.* Baker, } 82 Indiana Repts., 146.

Plaintiff and defendant were married in 1867. In 1874, defendant became insane and was committed to an asylum, where he has since remained. Plaintiff instituted this suit for a divorce on the ground that defendant failed to support her.

The Supreme Court, on appeal, held that this did not constitute sufficient ground for divorce ; that the statute providing for divorce where the husband fails to support his wife, does not apply where such failure is caused by mental or physical disease.

CASE XXXII.

Gerhold *vs.* Wyss, } 12 North Western Reporter, 811.

Plaintiff and defendant were married in "September or October, 1867." A few days thereafter plaintiff learned of defendant's insanity, but continued to live with her until September, 1881, when a decree of separation was made. He now sues for her support during the time they lived together.

The Supreme Court of Nebraska held that as plaintiff knew of defendant's insanity but continued to live with her, he was obliged to support her.

Insanity and Life Insurance.—The question of insanity in relation to life insurance occasionally arises, and is made the basis of refusal to pay the amount of the policy upon the part of the companies.

It sometimes happens that an individual insures his life and fails to state that he has suffered from a nervous disease which is the precursor of a form of insanity. A case reported by Taylor and Tardieu* is that of a gentleman who insured his life, afterwards becoming insane. The company refused payment, asserting that the assured was aware of his malady when he applied for a policy, and refused to so state. The jury decided for the defendant, and the judge charged the jury that they must decide if the mental disease had a tendency to shorten life, for in this case the dissimulation that had been proved was important. If the alienation had this tendency they must decide in favor of the defendant.

One of the oldest cases of this kind is that reported by Beck and the high position of the insured party gives the case much interest.

"In 1824, a policy was effected by the Baron Von Lindenau on the life of Frederick IV., Duke of Saxe-Gotha and Altenburg, in the Atlas Insurance Company. The Duke died on the 11th of February, 1825, and the insurers refused to pay the sum insured for.

"On the trial it appeared that Lindenau had stated in his application that the Duke was not gouty, asthmatic, or consumptive, or subject to fits; that he had never had apoplexy, and that he had no disease tending to shorten life. Two physicians of the Duke certified, that since the year 1809, he had had a dimness of the sight from amaurosis in the left eye, and since 1819 had been "*hindered*" in his speech from having had an inflammation of the chest, of which he had been perfectly cured. In a communication from an agent in Germany, it was mentioned that the Duke had formerly led a dissolute life, by which he had lost the use of his speech, and according to some that also of his mental faculties, which however is contradicted by the medical men.

"On this the company, instead of asking an ordinary premium of £2 17s. per cent. per annum, required £8 per cent.

"It now, however, appeared that the Duke had been afflicted with almost a total loss of speech from 1822 to the time of his death, which one of the physicians attributed to local paralysis,

* Annales d'hygiene publique, lxxvi, page 152.

and that he had periodical catarrhal affections, accompanied with fever. The chamberlain of the Duke, in his examination, mentioned that he had never complained of pain in his head. He ate, drank, and slept well, but could not speak. Dr. Dorl, physician to the Duke, agreed that his intellectual faculties were impaired, although his bodily health was good. On examination after death, no chronic disease was discovered in the viscera or any part of the trunk ; but in the head was found a large tumor six inches in length, two in breadth, and one in depth, which not only pressed on the brain, but had depressed the skull at its base. It was inferred that this tumor had commenced in early life.

"The defense was that there had been a suppression of material facts.

"Dr. Green, an eminent English surgeon, gave it as his opinion that from the history of the case merely, there were no symptoms of organic disease. He further thought that the tumor in the skull must, during life, have been in a passive state ; and from its appearance on dissection that it must have been formed in early life. He was only willing to allow that the symptoms mentioned above, would lead to a *suspicion* of disease in the head ; and he was disposed to ascribe the difficulty of speech to want of volition, and not to tumor in the brain. In reply however, to a question of Lord Tenderden, he answered : "If I., as a medical man, was asked by an insurance company, concerning the state of a man's health, who was unwilling to move, who was subject to control upon his intellect, and who had lost his speech, I should not consider myself at liberty to forbear mentioning these circumstances." Lord Tenderden, who tried the cause, said this was sufficient ; and that he should charge the jury, that if any material facts relative to the Duke's health were concealed, then the policy was void.

"The plaintiff elected to be non-suited, and subsequently made an effort to obtain a new trial but it was refused."

A French decision holds that, if a person applies for a policy and withholds the fact that he has been insane, or has a disease which may lead to insanity, his policy is null and void, and he cannot expect the return of the premium, even though the person assured may die of some other disease.

General paresis may sometimes enter into thequestion of life insurance. A case is related by Le Grand du Saulle which shows how one of the French companies was victimized. Two brothers went to the office of a Parisian alienist, and the elder had a private consultation, the result being that he was informed

that the other had the incipient signs of general paresis, and that death would occur in three or four years. They departed, and the result was that a policy of insurance was procured for 100,000 francs. Three years afterwards the elder brother quietly pocketed the results of the robbery.

A peculiar case is reported by Le Grand du Saulle. A physician well known in science had for nine years before his death a life policy for 100,000 francs. He suddenly presented the signs of great cerebral excitement, became boasting, and wrote and spoke in an exaggerated manner. He again went to the companies and insured for 500,000 more. When the contract was prepared and ready for signature the manner of the doctor was so vehement and excited that the agent believed him to be drunk, and under the pretext of having forgotten to insert an indispensable clause took back the policy. Upon the following day the medical man was sent to an asylum, and six months afterwards died of general paresis. The company paid to the widow the 100,000 francs and considered itself very fortunate in not having to add the half million francs the husband desired to insure for. (See Appendix G.)

CASE XXXIII.—SUICIDE, DISPUTED POLICY OF INSURANCE, NEGLECT OF INSURED TO ANSWER QUESTION IN POLICY REGARDING HEREDITARY INSANITY—VERDICT FOR PLAINTIFF.

Newton
vs.
Mutual Benefit Life Ins. Co., } 76 N. Y., 426.

Henry C. Ross had effected an insurance on his life with defendant and subsequently terminated his life by taking a dose of laudanum while insane. In his application for a policy he had stated that no member of his family had been afflicted with insanity or other herditary disease, but stated that his father had died of a brain disease caused by a hurt. On the trial it was proved that his father had received an injury on his head in childhood resulting in a weakening of his mental powers, and that at the age of 47 he was placed in an insane asylum, and afterwards died. On this testimony plaintiff was nonsuited, but on appeal the Court of Appeals reversed the judgment of non-suit and ordered absolute judgment for plaintiff.

CASE XXXIV.—SINGULAR FRAUD UPON INSURANCE COMPANY, MURDER; DEFENSE OF INSANITY; NO EVIDENCE HOWEVER OF ITS EXISTENCE; ACQUITTAL.

State
vs.
Isaac C. West, } 1 Houston's Dela. Criminal Repts., 373.

Defendant was indicted for the murder of a negro known as "Couch" Turner, in the town of Dover. It appears that defendant was experimenting with an apparatus for the manufacture of a peculiar gas, which he claimed, if inhaled, would cure several kinds of diseases. That two weeks before the murder prisoner rented rooms on Loockerman street, Dover, stating that he wished them for a short time only, as he wanted "to do enough in two weeks to make or break him." That on the morning of December 2d the prisoner engaged deceased, who was a stranger to him, to carry a box to his rooms, and that deceased had not since been seen alive. That between 11 and 12 P. M. of the next day, while in the Capital Hotel, prisoner suddenly left saying that his retort was leaking and he feared an explosion. That an hour afterwards his rooms were discovered to be on fire, and when broken into the mutilated body of deceased was found, with the head, hands and feet severed, and saturated with coal oil. On the 5th of December prisoner, who had fled, returned to Dover and surrendered himself and made a confession, in which he said that after he had paid deceased for carrying the box he offered to come again in the afternoon and fill his gasometer with water; that he met deceased on the street in the afternoon and brought him to his rooms, preceding him upstairs; that after he arrived in the room he turned and saw deceased with a hammer in his hand and the deceased demanded his money or he would kill him; that he then picked up a piece of axle and deceased struck him, crushing his hat. That he then struck deceased on the neck, killing him instantly. He then cut off the head, hands and feet, and skinned the body and broke several of the bones of the body. He also cut the nose and lips from the head and then crushed it, to prevent recognition. He then buried the head, hands and feet and saturated the skin with alcohol and lit it to see if he could thus change the color of the skin; that in doing this he set fire to the premises; that he then left town but returned the next day. Also that his life was insured for $25,000. It

was claimed on behalf of the State that the confession that prisoner had endeavored to change the color of the skin after mutilating the body, and then firing the premises, was proof that he had committed the murder in furtherance of a conspiracy to get the amount of insurance on his life ; believing that the remains would be mistaken for his. On behalf of defense insanity was urged and it was testified that prisoner's father had been of unsound mind for three months in 1836 ; that prisoner had had several falls when a child which had rendered him unconscious ; that in 1869 he walked from Baltimore, one hundred miles, to Dover to see his mother, whom he had dreamed was ill ; that in the summer of 1872 he had washed two cats and hung them in a basket to dry. That he had made a collection of various articles, chiefly of no value, for the purpose of forming a museum, and which he highly prized, in which were an old shoe, an old umbrella and a valuable frame mirror. That in packing these for removal he had carefully wrapped the shoe in paper and a sheet while the mirror was unprotected and consequently badly broken. He had also attended a political meeting with a dog, which he said he intended to present to General Grant. He had driven to a meeting on one occasion and in the course of two and a half hours had got in and out of his carriage twenty-five or thirty times ; he appeared each time to do something to the horse or harness though nothing seemed required to be done.

Several witnesses testified to his general unsoundness of mind, but the State produced a number of witnesses who testified to a long acquaintance with him and who had never noticed any symptoms of an unsound mind.

On the trial the jury returned a verdict of "Not Guilty." This verdict, however, may have been given on the ground of self-defense.

The Legal Status of the Idiot.—Though in the United States the idiot is deprived of his civil rights, he is, curiously enough, permitted to vote. He is considered incompetent in the matter of will-making and obligations of any kind contracted by him are null and void because of his want of comprehension of the nature of these acts. He is also considered irresponsible criminally when it can be shown that the crime is motiveless and unintentional (in their legal sense) and the existence of will is disproved. In these cases there is neither realization of punishment nor consequences.

The Responsibility of the Deaf and Dumb.—The mute

was at one time considered to be as irresponsible as the idiot, so far as testimony was concerned in courts of law. However, a much more intelligent view of the question of competency of the deaf and dumb is now taken, and it is by no means the rule because certain channels of expression which put the individual in communication with the world are cut off that he is entirely deprived of intelligence.

Under the English law a deaf mute is not incompetent to give evidence unless he is also blind, and a deaf and dumb person who has had no education or instruction cannot be held responsible in a criminal case (Taylor).

A deaf mute who enters into a marriage knowing what he does and assenting by signs is considered responsible, and such a contract is binding.

Dr. Peet, who has had very wide experience with the deaf and dumb, gives the following general principles in regard to their rights and responsibilities :

"A deaf mute who has no knowledge whatever of written languages may yet, if his dialect of gestures is sufficiently copious and precise, possess the intelligence necessary to manage his own affairs, to make all civil contracts, to execute a deed or a will, or to give evidence in a court of justice.

"But as the degree of intelligence and of moral development in uneducated mutes is very various, some who have been neglected in infancy being but a step above idiots, they should be carefully examined to ascertain whether they really possess the necessary degree of knowledge and intelligent will.

"With respect to the formalities used, it may be laid down as a general rule that the deaf mute who can read and write but imperfectly or not at all, should be regarded as in the position of a German or Frenchman, whose ignorance of our language necessitates the employment of a sworn interpreter between him and the court.

"But when the deaf mute can read and write well, the best mode is that prescribed in the French code. In the case of such, reading supplies hearing, and writing supplies speech. Hence it follows that a paper presented to a well instructed deaf person calling his attention by pointing with the finger to the writing should be considered as read to him, it being understood, of course, that there should be sufficient light and sufficient legibility of writing. We think, however, it ought to be specially enacted that a legal service, in the case of such persons, should consist in giving them a copy of the writ or notice to be served informing in writing of its nature and contents ; and in the case

of deaf mutes who cannot read or but imperfectly, the reading may be accomplished by the aid of a competent interpreter. Any legal oath or obligation may be taken or assumed by a well instructed deaf person by writing out with his own hand the formula before witnesses with such forms of solemnity as the occasion may demand, or by a conversation in writing with the officiating magistrate.

"It should, however, be generally understood that many of the deaf and dumb who have received more or less instruction in our schools are still but imperfectly acquainted with written language, and that signs are the surest and readiest means of reaching their conscience and intelligence, the surest means, also, that they possess for explaining their own meaning clearly. * * * * And before the criminal as well as before the civil law the deaf mute has the same rights and is subject to the same accountability as his brother who speaks and hears. * * * * The ignorance and neglected condition of the uneducated deaf mute may, however, be justly urged in extenuation of his faults, as an appeal to the compassion of the court or of the pardoning power. And cases may occur in which a deaf person has acted under erroneous impressions, natural in his circumstances as, for instance, in resisting legal process, believing it to be unlawful violence. In such cases there is evidently no more accountability than in cases of hallucination.

"And as it is of great importance to every man whose interests, liberty, or life are at stake in a court of law, to know, as they transpire, the proceedings and evidence against him, we think it ought to be made a rule that in all such cases an interpreter should be assigned to the deaf mute who will keep him advised of at least all the important points in the proceedings, by writing, or by the manual alphabet and signs according as the one or the other mode is the more clearly intelligible to the prisoner."

XXXV.—MURDER BY A DEAF MUTE—ACQUITTAL BY REASON OF IRRESPONSIBILITY.

State *vs.* Jesse Draper, } 1 Houston's Dela. Crim'l Reports, 291.

Defendant was indicted for the murder of Nathaniel H. Dickerson, and pleaded not guilty. The evidence showed that

prisoner was a negro, aged thirty, deaf and dumb from birth, and had been employed for seven years by the father of deceased; that he was strong and powerful, and of a very violent temper at times; he had always evinced a strong partiality for all of the family except deceased, who was the only one who could subdue him when he was violent; that on November 9, 1867, while returning from Georgetown in company with deceased and others, he was ordered by deceased to get out of the cart in which they were riding. He got out and became very violent; shook his fist at deceased, who jumped from the cart and grappled with him; he then stabbed deceased with a pocket knife fifteen times, killing him. (It was proved that prisoner had been seen sharpening this knife two days prior to the murder, and that he had shown it to parties to see how sharp it was, and had flourished it as if cutting some one.) It was also shown that prisoner was possessed of considerable intelligence and mechanical ingenuity; was able to make himself well understood, although he had never learned the language of mutes; he was a good workman; knew the boundaries of the land in the vicinity better than the owners; knew the value of our coins and bank notes; he believed in future reward and punishment, although he never received any religious instruction; knew and understood the punishment for crime. His previous character had been good. After the commission of the murder he seemed to exult over it, although he was conscious of what he had done.

On the trial the jury returned a verdict of not guilty by reason of insanity, or want of criminal responsibility.

Criminal Responsibility.—The question of responsibility in criminal cases is one worthy of the closest study. We are not to consider the subject in any sentimental manner, nor to build up a flimsy and utopian theory with which to excuse those in whom it is *difficult to find* marked phases of intellectual degeneration—in other words, the classical evidence of disease. The moral element is one of difficulty.

In the words of Bucknill:*

"If the speculations of the school or closet lead us to the belief that insanity may sometimes occur through the dominating power of a mental habit, without the intervention of disease, such opinion will be found foreign to the practical questions to be decided in courts of criminal justice. However interesting it may be to the psychologist to trace the growth of a vicious

* Bucknill—Criminal Lunacy, p. 20.

indulgence in some passion or instinct through all the gradations of mental habit, until he feels himself justified in denominating the result, a state of insanity; he must not forget that in the trials of criminals supposed to be insane, the question is not alone respecting the existence of insanity, but respecting that of irresponsibility also. The man who would claim for a criminal exemption from punishment on the plea of insanity, arising from the vicious and uncontrolled indulgence in some passion or emotion, would have to establish not only the existence of such a form of insanity, but to defend two other positions, namely, that a man is not responsible for conduct resulting from vicious habits of mind, provided the latter gain over him a complete mastery, and compel him, contrary to all dictates of prudence, to actions injurious to society and ruinous to himself. And secondly, that neither the fear, nor the infliction of punishment, will prove efficacious in preventing the repetition of such acts.

"It would be a puerile employment to show the untenable nature of such positions, and it must suffice to express in this place our conviction that insanity resulting solely from vicious habits of mind without disease, cannot confer irresponsibility for criminal acts; and that punishment, or more properly speaking, corrective discipline, is competent to restrain its mischievous manifestations.

"Cicero says that all fools are insane; and Hale, that all criminals are insane; and when folly and criminality have reached their climax and borne their fruits, it is not an edifying spectacle to behold the psychological physician stepping forward for the purpose of claiming immunity for the offender.

"The element of disease, therefore, in abnormal conditions of mind is the touchstone of irresponsibility, and the detection of its existence or non-existence is the peculiar and oftentimes the difficult test of the psychopathist."

Responsibility in Relation to Imbecility.—In determining the responsibility of an *imbecile* we are to inquire into the circumstances of the crime, as well as his education, and his previous life. In regard to the first, we are to determine whether there has been any attempt at secrecy, or whether he has been regardless of consequences, his explanation, the method of the execution of the act of violence, and his behavior after the commission. If a person of low intelligence and depraved morals (his propensities from his earliest years, as the result of cerebral disease, being bad) commits a crime, more or less pur-

poseless, or at best with slight motive, perhaps a murderous assault without sufficient provocation; if such a crime is attempted or accomplished without any concealment, and boasted about ; there would at least be the suspicion aroused that a degree of irresponsibility existed.

CASE XXXVI.—ASSAULT BY AN IMBECILE—MOTIVELESS ACT. CONVICTION.

Johnson *vs.* The State, } 10 Texas Appeal Reports 571.

Defendant was tried for an assault with intent to murder J. H. Daniels, and convicted. On the evening of Dec. 7, 1880, while Daniels was entering his home in Grand View he was shot in the back by the prisoner. He immediately turned around and struggled with the prisoner who escaped, uttering a sound resembling the bark of a dog, but was arrested the next day. He was a stranger in the neighborhood and no motive was shown for the act. He had frequently been known to get up during the night, when asleep, and on the night of the shooting was very uneasy. Dr. Young, who had known him for some time believed him to be imbecile, but not insane, while Dr. Keating who was his regular physician, positively pronounced him insane. There was no further evidence as to this defense except that of a few witnesses on the part of the State who believed him to be sane.

On appeal the Court of Appeals affirmed the conviction.

There are, as I have said, many individuals who know the difference between right and wrong and yet cannot restrain their tendency to the latter. Many persons consequently fight against their impulses and many partially succeed as did the old lady whose case is referred to by Casper. Yet their reasoning is as often powerless.

This author says: "In itself this case, in the form it assumed at the period of our examination, was one of daily occurrence, for it was unquestionable that the old lady, at the time sixty-eight years of age, a sensible, educated woman of pure morals, who a long time previously had been judicially declared to be 'imbecile,' that is 'incapable of considering the effects of her actions,' and was still under guardianship, and the effects of her interdiction which she was endeavoring to get removed, was perfectly restored, and, as the statutes ex-

presses it, had re-attained 'the full and free use of her understanding.'

"I relate this case here, however, because it gives a most instructive peep into the interior of a mind under the trammels of disease, and gives from a credible witness a confirmation of the well-known psychological experience, that those mentally diseased may not only have a dim cognizance of the difference between good and evil (vide p. 110, vol. iv.), but also that even in respect of this obscure consciousnes they can command themselves *up to a certain point.*

"The discipline of every lunatic asylum is based upon the very proper recognition of this fact. Our convalescent had gone deranged fifteen years previously, and had remained so many years. With the greatest composure she communicated to me many particulars in regard to her derangement and its excesses, describing with the utmost distinctness her then process of ratiocination. For a time she was impelled to break panes of glass with stones. But she knew how improper this was, *therefore she threw the stones carefully*, so as not to break the glass, but if this happened, *then she rejoiced at it!* She set about tearing her paper bed-screen; but, as she found it abundantly replaced, she came to the conclusion that this was done intentionally to keep her from destroying more valuable articles, *therefore she left off* tearing the screen. Similar tendencies and similar logic were exhibited in many other proceedings, and she could not sufficiently describe to me how puzzling to her now seemed the reasoning which then seemed clear to her. Similar statements are made every day by insane people, who have become truly restored; but similar confessions to these in respect of individual minor traits, are not so frequent."

The English Test of Responsibility.—The English law in brief is that the criminal cannot be held responsible if at the time of the commission he was incapable of distinguishing right from wrong, and did not then know that the act was an offense against the laws of God and Nature. If on the contrary he was capable of distinguishing right from wrong, then, although the delusion may be connected with the crime, and its basis—the person committing the act of violence in revenge for imaginary injury—if the person has capacity to know that he has committed an illegal act he is fully responsible. The real knowledge of the difference between right and wrong has been the test for years, yet it is not sufficient. The charge of Lord Deas of Aberdeen is as follows: "1. If a man knows what he

is doing—that is to say, if he knows the act that he is committing—if he knows also the true nature and quality of the act and apprehends and appreciates the consequence and effect, that man is responsible for what he does. If from the operation of mental disease he does not know what he is doing—or if, although he knows what is the act he is performing, he cannot appreciate it or understand either its nature or quality—its consequence or its effect, then he is not responsible.

"2. If the jury believed that the prisoner, when he committed the act, had sufficient mental capacity to know, and did know that the act was contrary to the law, and punishable by the law, it would be their duty to convict him. This, his lordship thought, was a safer and more accurate mode of putting the question before the jury than that they should consider whether the accused knew right from wrong." (Ogston.)

American Decisions in Regard to Responsibility.—The American decisions in regard to criminal responsibility are practically alike, and the question of the knowledge of right and wrong seems to be that to be decided by juries. I may quote the charge of two American judges:

The decision of Judge Smith in the Montgomery trial at Rochester was substantially as follows:—"There is now no room for doubt as to the rule of law in this State, a man must have sufficient knowledge, reason, capacity and mental power to understand not merely that his act is in violation of law, but that it is intrinsically wrong. Every human being endowed with reason knows that to take the life of a human being is against the law of nature and of God. It is not sufficient that he knows the thing is an offense against human laws, but he must have reason and capacity to know that he is not only violating the laws of man, but the laws of God and nature."

The late Recorder Hackett in the McFarland case charged the jury "that in uttering the phrase, 'state of insanity,' I am not to be understood throughout as meaning thereby the state in which a man knows the act he is committing to be unlawful and morally wrong, and has sufficient reason to apply such knowledge and to be controlled by it. In using the phrase, 'state of insanity,' I am to be understood throughout as meaning the state under which a man is not accountable for an alleged criminal act because he does *not* know that the act he is committing is unlawful and morally wrong, and has not reason sufficient to apply such knowledge and to be controlled by it.

* * * To constitute a crime, the accused must have been acted upon by motives and governed by will."

The Test of Right and Wrong.—It is a very difficult matter sometimes to say whether the alleged lunatic knows the difference between right and wrong. Unless there be obvious insanity, great care should be taken in answering the questions propounded by counsel. This is a question for juries to decide and after all the medical man can only say that he considers the patient's mind diseased. "It is sufficient," says Haslam, "for the medical practitioner to know that the person's mind is deranged, and that such a state of insanity will be sufficient to account for the irregularity of his actions, and that in a sound mind the same conduct would be deemed criminal. If violence be inflicted by such a person during a paroxysm of rage, there is no acuteness of metaphysical investigation which can trace the successions of thoughts, and the impulses by which he is goaded for the accomplishment of his purpose."

"Right and wrong" are relative terms. What may be right in one community may be wrong in another. Browne says: "There is no right and wrong, merit or demerit *existing independently of the agents who are virtuous or vicious.*" The want of harmony and wide diversity of opinion for example among religious bodies, is a simple example of how difficult it is to make the test to go a step further. It has been proved as I have shown that lunatics know the consequence of their acts and the penalties prescribed by law. The true test after all is the condition of the will.

Mittermaier maintains "that two conditions are required to constitute that freedom of will which is essential to responsibility, viz., a knowledge of good and evil and the faculty of choosing between them. The knowledge of good and evil will require, first, that knowledge of one's self by which we recognize our personal identity and refer our acts to ourselves. Secondly, acknowledgment of the act itself, *i. e.*, of its nature and consequences; thirdly, a knowledge of the relation of the act both in regard to men and measures; fourthly, a knowledge that the act in question is prohibited either by the moral or the statute law. He rebukes the English jurists for their rigid adherence to the antiquated doctrine, that whoever can distinguish good from evil, enjoys freedom of will and retains the faculty if he chooses to use it, of framing his action to the requirements of the law. The true principle, according to this authority, is to look at the personal character of the indi-

vidual whose responsibility is in question. To his grade of mental power; to the notions by which he is governed; to his views of things; and finally to the whole course of his life and the nature of the acts with which he is charged. A person who commits a criminal act, being fully cognizant of the nature of the laws, and of the punishment to which he is exposing himself, may yet be of insane mind. The true test of irresponsibility should be, not whether the party accused was aware of the criminality of his action, but whether *he has lost all power of control over his actions.*"

Ordonaux on Responsibility.—Dr. John Ordonaux, the well known writer upon the legal relations of insanity, thus sums up the questions to be determined in relation to criminal responsibility:

"*First*—Whether the defendant, at the time of the alleged crime, knew the nature and consequences of the act he was committing?

"*Second*—Whether, if he did so know them, he had a felonious intent in committing the act?

"*Third*—Whether, knowing the nature and consequences of the act, he had the power to choose between doing or not doing it?

"*Fourth*—Whether, supposing he had lost the power of choosing between right and wrong in reference to the particular act, he had lost that power through *disease*, and not through intoxication, violent anger, or any form of self-produced mental convulsion?

"I cannot conceive of any case of insanity combined with crime to which these questions would not be relevant. They give the defendant every opportunity of showing what his true mental condition was at the date of the offense, and at the same time leave no loophole through which simulators can escape detection and conviction.

"But there is a far more difficult class of cases to deal with than these, and one which taxes not only the skill of experts, but the legal wisdom of counsel and the judicial forbearance of courts. I allude to those cases of *paroxysmal* insanity which never come into the field of judicial investigation without giving rise to much unjust criticism upon all knowledge of mental disorder. Thus whenever, upon a return to a writ of habeas corpus, a party is discharged from a lunatic asylum, it seems to be taken for granted that he was either illegally committed there or improperly detained beyond the period of his

established convalescence. Apart from *forms* of procedure required by statute, you will observe that both the above questions involve radical problems which cannot always be easily or safely decided by a judge at chambers after a short conversation with the alleged lunatic, or hearing a few affidavits read of persons who have made quasi medical examination of him in an hour's time. Without further testimony relating to his life, habits, conduct and conversation, no one can safely undertake to give a final opinion upon his mental sanity.

"I can produce any day a hundred lunatics, selected from our various asylums, who, if they were placed in any parlor or office and engaged in general conversation, would no more reveal their insanity necessarily than they would their religious convictions or their parentage. If you were asked to state under oath what your opinion of such person's sanity was, you would feel almost ashamed to doubt it for fear of casting imputation upon your own. Yet these people are lunatics, and need hospital treatment. You think they are well because they are not in an actual paroxysm of their malady, but they are just as much within its grasp as a man with tertian ague is within the grasp of his disease on his well days. Insanity, like all the neuroses, is a disease characterized by intermittent exacerbations, and while in its intervals its victims may seem perfectly restored to the eyes of casual observers; experts know but too well the unreliability of any opinion based on a personal examination, when not accompanied by a complete history of the patient's past life."

Impulsive Insanity.—*Impulsive insanity* is often urged as a criminal defense. I cannot believe that any individual can be sane immediately before and immediately after the commission of an act and insane at the instant. A well known writer thus expresses himself:

"I see no ground on which to rest an hypothesis of an impulsive insanity, or to justify an incorporation in our medical jurisprudence of such a form. I cannot conceive of a homicidal act, impulsive, without motive, delusion, or passion, simply a so-called impulse to kill, and a careful analysis of clinical cases, under my own observation, as well as a large experience in the examination of criminals, sustains this view. Impulsive disease can not exist. The term impulse used to describe certain acts of the insane, executed suddenly, and without apparent premeditation, may be proper enough, as qualifying a mental state during an act, as impulsive homicide, but this does not

justify the transposition into homicidal impulse. Such transposition would show, not that the acts were apparently unpremeditated and sudden, but that in the mind there was suddenly generated a murderous impulse, an irresistible power, which, without the intervention of reason, or any intellectual act or motive, suddenly impels to the physical act. Man is not the prey of blind impulse."

The annals of the New York courts are filled with instances of so-called emotional or paroxysmal insanity. The cases of Cole, MacFarland and Scannell, are familiar to many of our readers and it only remains for me to call attention to the utter flimsiness of the so-called evidence of insanity produced by ingenious lawyers and desperate friends.

Case XXXVII.—Major General George W. Cole was tried in the city of Albany in the year 1868 for the murder of L. Harris Hiscock, who seduced the wife of the former. In this case the social position of both parties greatly increased its interest and caused much excitement throughout the state; after much trouble in procuring the jury the facts of the homicide were detailed. On the evening of the 4th of June, 1867, Hiscock was standing in front of Stanwix Hall talking to two friends. The defendant Cole meanwhile entered the hotel through a side door, and advanced rapidly to where Hiscock was standing, and placing a Derringer pistol within a few inches of the victim's head, fired, killing him instantly.

The defense in this case was emotional insanity, and after an eloquent speech by Mr. Hadley the counsel for the defense, a number of medical witnesses were called to prove the condition of the prisoner's body and mind previous to the murder. Dr. Manly who had been in the army with the defendant, Dr. Roberts, and others testified to the fact that the prisoner had had an injury to the bowels, with hemorrhage; that he was depressed and gloomy and suffered from "bilious" troubles. The evidences of mental disease detailed by these gentlemen were instanced: as constant whittling while in the field, of lockets, and rings and other perishable little ornaments of no consequence, absent mindedness, "cheerful" when he was well and dejected and melancholy when he was sick. One witness testified that he had melancholia "and melancholy and kleptomania are about the same thing." Another witness testified that if one person should suddenly come upon another who was alleged to be the seducer of his wife he would be very likely to

take his life, and he further stated that such would be an insane act. He further stated that bleeding at the nose, which was a frequent occurrence with the prisoner, indicated compression of the brain. Most of the other testimony for the defense was of like character, and it appeared that the prisoner though physically disabled as the result of his honorable service in the field, presented no evidences of mental disturbances other than those any individual in his right mind would display if outraged in the same way that the prisoner was. Many witnesses testified for the prosecution that the prisoner before the homicide seemed to be in his right mind ; took interest in his business, appeared robust and in good spirits, and while in the army did not impress any of his comrades, except the one who testified, that he was at all out of his mind. The cowardly commission of the murder in this case, its deliberate execution and his subsequent behavior, were incompatible with actual insanity or at any rate with "paroxysmal insanity." It is almost unnecessary to add that as a result more of the eloquence of the late James T. Brady and others, than any thing else, the prisoner was acquitted.

This case, as well as all others, is an example of the difficulty of conviction in murders prompted by motives of revenge as a consequence of the alienation of a wife's affections, and so long as the present state of chivalrous sympathy (?) exists we may be prepared to find the defense of emotional or paroxysmal insanity a sufficient one.

Judge Parker in the Cole case instanced no less than eight examples where men have taken the law in their hands and have been acquitted under these circumstances. The last and most farcical example of acquittal by reason of emotional insanity is that of the Kentucky Congressman, whose mind appears to have been in such an unstable condition that the unfounded suspicion of his wife's infidelity was sufficient to produce paroxysmal insanity, though the evidence clearly indicated deliberate, premeditated murder.

CASE XXXVIII.—EMOTIONAL INSANITY—MURDER OF A WIFE'S PARAMOUR—CONVICTION.

Anthony Clark, *vs.* State, } 8 Texas Court of Appeals, Rpts. 350.

The prisoner was tried for the murder by shooting of Gabe Leonard on March 2, 1878, having obtained a confession from

his wife that said Leonard had been intimate with her. There was no controversy over the *corpus delicti* and the principal defense made was insanity created by jealousy. There was no attempt made to prove insanity either before or after the murder but the defense rested on the testimony that defendant was a good husband and an industrious man, and several citizens gave him an excellent character generally.

The prisoner was found guilty of murder in the second degree and this was affirmed by the Court of Appeals.

CASE XXXIX.—MURDER—TRUMPED UP DEFENSE OF INSANITY—CONVICTION.

State *vs.* Redemeier, } 8 Missouri Appeal Repts. 1.

The defendant was convicted of murder of Franz Vosz, a stone-mason in North St. Louis, whom he without provocation shot dead. The defense pleaded insanity. There was no proof that prisoner had ever been considered insane prior to the shooting; but defense claimed that the incidents surrounding the shooting and the fact that no motive for the act was shown were proof of prisoner's insanity. Several witnesses testified that the prisoner had stated to each of them different motives, some of them very absurd, for committing the crime, and each of these motives was shown to conflict with the facts. He seemed to have no conception of the crime he had committed. Several witnesses, among them his own mother, testified that they knew him for years and had never observed any symptoms of a deranged intellect in him. About two years before the murder deceased had refused to include prisoner in an invitation to drink with him but it was not shown that defendant exhibited any anger on that occasion. Beyond this no motive was attempted to be shown. Three experts were examined, one of whom believed that a taint of insanity was present in the prisoner; this opinion was based on a personal examination. The other two experts, from hypothetical cases based on the facts, believed the prisoner to be sane.

On appeal to the St. Louis Court of Appeals the conviction was affirmed.

In this case after the prisoner was hung an attempt was made to show that his brain was that of an imbecile.

CASE XL.—WIFE MURDER—DEFENSE OF INSANITY—DOUBTFUL EVIDENCE—CONVICTION.

Sayres *vs.* Commonwealth, } 88 Pa. St., 291.

Prisoner, in 1875, having had some difficulty with his wife, threw her down-stairs and broke her arm, for which he was sentenced to imprisonment, but, after a short time, upon her solicitation, he was released, although she refused to live with him again. After his release he made several unsuccessful attempts to induce her to take him back. On Sunday, November 18, 1877, the prisoner followed his wife into church and at the conclusion of the services shot her in the back. He attempted to escape, but when arrested made no resistance, and complained of a pain in the head. Mrs. Sayres died Nov. 29th. It was proved that prisoner was impoverished while his wife was in good circumstances, and a motive thus shown for his wishing to live with her. The fact of the shooting was not seriously disputed. The defense was insanity, and it was attempted to show that deceased had said after the shooting, "My husband shot me, but I don't want him punished," to show that she knew he was insane. This was very properly ruled out. (On appeal the Supreme Court sustained this ruling.) It was shown that several blood relations of the prisoner had been afflicted with mental disease; a sister was weak-minded; a niece subject to fits; a cousin born an idiot. One witness testified that prisoner was queer, of peculiar habits. Another that he was "as crazy as a bed-bug;" that his brain was shattered; others that he cried because his hands were stained; gave strange answers to questions; was afraid to sit alone; he supposed his wife and children had poisoned him; was nervous and could not sleep; complained of his head; was afraid of a dog or cat. Another witness testified to his conduct for a week preceding the shooting—his eyes were wild; threw meat on the floor, and preserves on the table. Dr. Wise, who examined him, believed him to be of unsound mind. To controvert this the physician of the prison in which he was placed, two keepers and the officers who arrested him, all believed him to be sane at the time of his arrest. Others who were associated with him in business testified to their belief in his mental soundness. Others testified that he had said "that his life was miserable and unpleasant, but that was no excuse for the shoot-

ing," and that "not being allowed to visit them (his children) was the cause of his shooting her." Several letters and a will of the prisoner were also produced to prove his sanity.

On the trial he was convicted of murder in the first degree and on appeal to the Supreme Court the conviction was affirmed.

CASE XLI.—HOMICIDE BY ALLEGED LUNATIC—HISTORY SIMPLY OF HYPOCHONDRIASIS—MOTIVE REVENGE—PRISONER CONVICTED, BUT CONVICTION REVERSED ON APPEAL.

Levi King
vs.
The State,
} 9 Texas Appeal Repts., 515.

The prisoner, on March 22, 1880, shot and killed Dr. H. W. Harrington. On the trial it appeared that Harrington levied on some property of the prisoner for debt, and that prisoner had threatened vengeance upon him therefor. After the shooting the prisoner stated that he had first been assaulted by deceased, but when it was shown to him that such was not the case, he appeared confused, but gave no other explanation.

For the defense it was claimed that the prisoner was suffering from masturbation, which produced hallucinations. It was testified that for three years before the murder he would occasionally leave home and wander through the woods; that he was while under these spells dull and sleepy; that he claimed he was a ruined man; neglected his business; and several witnesses testified on general impressions both for and against the insanity theory.

The prisoner was convicted; but on appeal to the Court of Appeals the conviction was reversed.

CASE XLII.—MURDER—DEFENSE OF INSANITY—HEREDITARY TENDENCIES PROVEN, BUT NOTHING ELSE—MOTIVE FOR CRIME—CONVICTION.

Webb
vs.
The State,
} 9 Texas Appeal Repts., 490.

On September 2, 1876, in the city of Galveston, defendant shot and killed Charles R. Foster, and was tried and convicted of murder in the second degree. It appeared in evidence that Foster had garnisheed some money of defendant for debt and that he had said that "Foster had better hunt his coffin before

he tried to collect that debt." After the shooting the prisoner appeared somewhat excited, but made no attempt to escape, although he had ample opportunity to do so. He finally surrendered himself to an officer; he was then very indiffierent and manifested annoyance when questioned about the murder. A brother and cousin of prisoner testified that his mother is insane; his grandfather was insane and committed suicide as also did a cousin who was insane. His sister was subject to epileptic fits; his father was very eccentric; none of these persons had ever been sent to an asylum. That on the night before the murder the brother met prisoner, who had been away from home for three weeks, and it was several minutes before he (prisoner) recognized him. His manner for some time before the shooting was strange and unnatural, and he became morose, moody and careless in dress. One witness testified that after the shooting his eyes glared and he looked so unearthly that witness became frightened. Drs. Seeds and Gibson, who had heard all the evidence, believed the prisoner was insane when he committed the murder. Dr. Stone would not express an opinion on the evidence, but said he had heard no evidence of insanity that could not be attributed to debauchery; he believed that the mind of defendant was distracted at the time of the murder, but not enough so as to relieve him from responsibility. Of the witnesses of the shooting (five in number) two stated that they saw nothing unusual in his appearance; the other three did not observe his appearance.

On appeal to the Court of Appeals the conviction was affirmed.

Insanity in Relation to Theft.—Theft may be committed by the insane, the crime being in some respects a feature of the early stage of the disease. Six patients suffering with general paresis who were admitted to the West Riding Asylum during a period of four years, had been arrested for larceny. Browne suggests that this propensity may be a direct result of the exalted delusion.

A patient with general paresis who had delusions of great wealth, believing that he was the possessor of 8,000 pounds, and had 16,000 children, was convicted of larceny. Shortly before the commission of the theft he showed his first symptoms of general paresis, and there was no history of intemperance or bad habits—in fact he had been a respectable man. His theft was petty, a few nuts having been stolen.

Theft is often the result of an insane delusion, the person

believing that the stolen articles belong to him, or that he has been commanded by God or some one else to take them for a purpose. The nature of the act and the purpose itself should be clearly those of insanity to bring irresponsibility.

The Commitment of Lunatics.—The laws regarding the commitment of lunatics are practically the same in every State. The certificates of one or more physicians who have examined the patient are required, and these must be approved by a judge of one of the higher courts.

State Laws.—In some States the case must be brought before a jury. In brief, the laws of the different States are as follows :

New York.—Patient to be examined by two physicians of at least three years' standing, who have been declared *Examiners in Lunacy* by a judge of a Court of Record. Upon certificates of these two medical men, sworn before, and approved by a judge of a Court of Record, the patient may be sent to an asylum. The approval may be procured at any time within five days.

Maine.—Patient to be examined by the municipal officers of the town, upon application of the friends of the patient or a Justice of the Peace.

Vermont.—Upon the certificate of two physicians residing in the probate district in which the patient lives, who shall not be members of the same firm, the patient may be committed.

In *New Hampshire*, upon order of the Court or a Judge of Probate, based upon the certificate of two reputable physicians whose respectability shall be vouched for by the Judge of the Supreme Court or Court of Probate, or Mayor or Chairman of Selectmen.

In *Massachusetts*, upon representation of the friends of the patient and the certificates of two graduated physicians of three years' practice, the patient is committed by order of the Court, after a personal examination, it necessary.

In *Rhode Island*, the certificates of two physicians of good standing are required, and an order of court procured at the solicitation of the guardian or friends.

In *Connecticut* the certificate of one or more physicians properly acknowledged by some officer or magistrate authorized to administer oaths or take acknowledgments of deeds when given, is necessary.

In *New Jersey* the patient is committed at the request of a friend, who shall present a certificate signed by at least one

respectable physician, who shall declare under oath that the patient is insane.

In *Pennsylvania* two certificates are required.

In *Virginia* the patient must be brought before a commission in lunacy, consisting of three magistrates, who shall summon the family physician and other witnesses, and if the patient is judged insane after a careful examination, he is sent to an asylum.

In *Maryland* the patient may be committed upon the certificate of one physician.

In *North Carolina*, upon representation of some respectable citizen, sworn to before some justice of the peace in the county in which the patient resides, he may be committed.

In *Mississippi* the patient may be received into an asylum upon the certificate of two physicians who shall swear to his insanity before a justice or county clerk.

In *Alabama* patients are received in the State asylum on certificate of the probate judge of the county, attested by one respectable physician or other witnesses, with or without a jury, as the judge may decide.

In *Ohio* the probate judge issues a warrant for the production of the alleged lunatic, and subpœnas such witnesses as he deems necessary, one of whom shall be a respectable physician, and upon being satisfied of the insanity of the person, he shall issue a certificate of commitment.

In *Indiana*, the insane are committed by two magistrates, who are required to personally visit the alleged lunatic, and to report to the county clerk, who subpœnas witnesses, and sends a certified copy of the proceedings to the Superintendent of a State hospital, requesting admission.

In *Illinois*, upon petition of a near relative of the alleged lunatic, he is brought before a jury of six persons, one of whom shall be a physician, and upon their verdict, a committal shall be made out by the clerk.

The law of *Michigan* requires that the probate judge, after calling two respectable physicians and other credible witnesses shall decide upon the question of the insanity of a person either with or without a jury.

In *Kentucky* the insane are committed by the inquest of a jury, their presence being required in open Court, unless it is shown upon the affidavit of two respectable physicians that it would be dangerous to bring the supposed lunatic into Court.

In *Iowa* the patient is examined by a permanent commission of lunacy composed of a practicing physician, a practicing

lawyer, appointed by the Circuit Judge, and a clerk of the Court. A personal examination is required to be made by the physician, and after a report to the commission a conference is held, and the patient committed if they deem him insane.

In *Wisconsin*, upon the certificate of two physicians the patient is committed by the county judge. A jury trial is accorded if requested by a relative.

In *Minnesota*, the probate judge, upon application, shall appoint some physician or physicians (not less than one nor more than three) to examine the person and to take proof, and upon their certificates a warrant of commitment shall be issued. In the city of St. Louis application is to be made to the health commissioner, who shall direct an examination by physicians, who shall request his commitment.

In *Arkansas*, upon application of any reputable citizen, any county or probate judge shall appoint a hearing, take testimony of competent witnesses, and shall direct an examination of the alleged lunatic by one or more practicing physicians of good standing, who shall submit a sworn statement of their examination, upon which a certificate shall be issued.

In *Texas*, upon the presentation of competent testimony, a patient may be committed by a jury of six if found insane.

In *California* and *Oregon*, upon the representation of either a friend of the patient, or two householders, and upon the presentation of certificates signed by at least two respectable physicians, the insane patient may be committed by an order of the Court.

The laws of other States contain practically the same provisions. A person of weak mind has not the same status in the eyes of the law in civil questions as in criminal. His responsibility is differently gauged.

Commissio de Lunatico Inquirendo.—In civil matters his incompetency may be so great as to suggest protection. He may be able to distinguish right from wrong, and have sufficient intelligence to prevent him from committing crime, but his mental condition otherwise may be such as to incapacitate him for the transaction of business, and the management of property. In this case he is afforded a protector in the shape of a guardian, after the process of the appointment of a *commission de lunatico inquirendo*. A guardian who shall protect him from imposition and fraud, and who shall prevent him from squandering his money. Not only is such a step taken for the protection of the idiot and imbecile, but for the insane and con-

firmed drunkard. The application for such a guardian is to be made by a near relative, who procures the affidavit of at least two physicians, and a commission of three members, one of whom shall be a physician, and the other a lawyer, shall be appointed by a Judge of a Court of Record. The case is then tried before a jury*, and upon their verdict a guardian, who must give bonds, is appointed by the Court. The individual is then practically a minor. In the event of his recovery, an application for the restoration of his ordinary privileges is made upon affidavits of physicians, and if the judge is satisfied of his sanity the guardian is discharged.

Great care should be taken in giving or preparing testimony, for it has often happens that the reasons assigned are of the most flimsy character, and may be trumped up by designing relatives, and too readily accepted by careless medical men. It should be ascertained whether the individual has been *insanely* extravagant—whether he has been swindled repeatedly, or drawn into absurd speculations. One old lady whom I examined, invested two-thirds of her small fortune in bogus mining companies within a few months, and spent considerable sums of money in the most foolish ways, while before this time she was penurious and economical. It is often necessary to decide the question whether a person of weak mind should be detained in an asylum or placed in charge of a guardian and permitted to live outside ; and the courts are exceedingly lenient in such matters, being especially careful in regard to the possible abridgment of personal liberty. The celebrated Dickie case was one of this kind, and though the medical men who examined the patient considered her an insane person, thus placing themselves in direct opposition to the press, their view of the case was disregarded, and Judge Brady ordered Miss Dickie's discharge, but appointed a guardian. The following interesting and truthful account of the case appeared in the NEW YORK TIMES :

CASE XLVI.—"Miss Dickie was sent to Bloomingdale six and a half years ago on the certificates of Dr. White, a prominent homœopathist, and of Dr. Alfred C. Post. She was accepted as a lunatic by Dr. Tilden Brown, and retained as such by Drs. Nicholl and McDonald, with the implied consent of her aged and imbecile father's physician and guardian, Dr. Ranney. It is highly improbable that she was unjustly committed and con-

* In the city of New York by a sheriff's jury.

fined, for the prestige of that merciful institution is too great and its medical staff too distinguished to allow great mistakes on such important matters.

"On the afternoon of January 16, 1878, Miss Dickie was visited by a physician, who gave her his name and address, and told her he was a physician who had come to see her. She was found to be diminutive in size, lame, and apparently deformed, hard of hearing, and with speech very indistinct and imperfect from a very wretched condition of her gums, teeth, and mouth. The latter, it was supposed, could easily have been relieved by careful rinsing and washing of the mouth. There were other signs of carelessness of person and dress which were not visible in the persons of the Matron, attendants, and other patients who were casually observed.

"In a little while she was conversing quite freely about bad treatment she had received from her father, who, she said, used to pull her hair and otherwise maltreat her; of deceit on the part of her brother and sisters; of bad treatment on the part of Dr. Brown and others. She also complained of the food she received; among others, that they sometimes had onions for dinner, and that they were served especially to annoy her. She also asserted that she had been promised any kind of food that she wanted. She stated that an effort was being made with her consent and that of her family to remove her from the asylum, and expressed a preference to live in the city rather than in the country, with some slight hint which suggested that she did not like green things, but desired to visit shops, go to her own church, give money to it, and live by herself. She volunteered to say that she read the *Sun* and the *Observer*, and showed copies of them; that she had a great impulse to improve her mind; quoted some simple little maxims at times, especially about not talking too much, when she was monopolizing almost the whole conversation, and mentioned with great glee that she had been down to court, but they had got nothing out of her, which I supposed meant that she had not committed or betrayed herself. She also insisted that Dr. Post had testified in her favor, and reiterated this statement when told that she was probably mistaken. As she occasionally quoted Scripture, she was asked if she had a Bible; it was then noticed that she seemed to keep almost all her property under lock and key, but she quickly produced her Bible from a locked drawer, and it was found not only filled with pencil marks from Genesis to Revelations, but many pages were folded in the most curious and complicated ways, as if to

mark special passages of great import to herself, but her visitor was surprised on unfolding these curiously doubled-up pages to find no pencil marks whatever upon some of them, and she avoided answering why she thus pointedly singled out particular pages. It is barely possible that those were pages which she did not wish to read, but nothing could be detected strikingly peculiar in the contents of those pages upon a short examination.

"Her first visitor had been alone with her for half an hour or more, when another physician came into the room, was introtroduced by name and title as a second medical man who had come to see her. She immediately went on conversing with him, and the first party looked at the surroundings. Her room was very neat, quiet and comfortable, was prettily furnished with a blue carpet, blue cottage furniture of a superior kind. His attention was attracted by hearing her tell her second visitor that there was a language of food as well as of flowers, and when asked for an illustration stated that coffee was brown, brown was a Quaker color, a Quaker was a friend, and that hence coffee meant friendship. That if one person gave another a cup of coffee, it was a sign of friendship, and if milk, which was white, was put into it, it was a sign of pure friendship, and the addition of sugar made it an indication of sweet friendship. In short, that coffee with milk and sugar in it was indicative of pure, sweet friendship. Then she volunteered to say that bread represented a friend; that a big piece of bread was a sign of a large friend; that butter signified refinement, and bread and butter a refined friend. She then quickly said that cabbage was white on the inside, and that signified purity, and green on the outside, but no questioning could make her say what the green meant. She continued to say if one cut up the inside of cabbage and put it on a little plate, it would indicate purity and something else which she would not disclose, possibly because it had reference to the green color. It is to be regretted that no inquiries were made as to the significance of onions, to which she has an antipathy, and by what articles of diet she represented the opposites of friendship, purity, sweetness, etc.

"Repeatedly while this conversation was going on her visitors were warned not to speak loud, as persons were watching all the time, up-stairs and down-stairs, through the register, pipes, etc., presumably the waste, water, or gas pipes, none of which, however, could be seen on casual inspection. These persons were also said to whisper to her through these tubes. She de-

clared that this food language was not peculiar to herself, but was known to and in constant use by all the attendants and patients; that her conversation and letters were communicated or perhaps telegraphed about the house, as she inferred, by single words, said by different persons, in various places, in the midst of their conversation, and by putting these detached words together, she found out by something in her heart or chest, not in her head, that they had become acquainted with the letters she had written, and the conversations she has had with others, and presumably with herself.

"It was very evident that Miss Dickie was of unsound and imperfect mind and understanding, yet for an hour and a half she had given no positive signs of absolute mental derangement. She knew who and where she was, described the institution as a honse of affliction, but she made no allusion or complaint of her fellow-sufferers, or of any noises or annoyances except the imaginary whisperings through the tubes. She was conscious of her own weakness and ignorance of many things, seemed satisfied to have as her guardian a bank president, whom she named, as she was not accustomed to deal with large sums of money. In short, she presented the usual mixture of reason and unreason so common in many simple lunatics. Sometimes she exhibited a good deal of tact and cunning, at other times of extreme childishness and simplicity, mixed up with delusions, hallucinations, unfounded suspicions, extreme prejudices and hatreds, great Christian piety, charity, and benevolence.

"The only question that could arise was whether it was absolutely necessary to retain her in the asylum. There seemed no objection to a trial elsewhere, provided all her property should not pass into the hands of strangers and irresponsible persons; that a proper residence should be selected where her peculiarities should not become the sport of the foolish and indiscreet; and that a competent maid, nurse, assistant, or matron could be found possessed of unmeasured patience, tact and resolution.'

In such cases, it undoubtedly happens that the patients may fall sometimes into the hands of designing guardians, so that the legal action may prove rather a curse than a blessing.

A case where interdiction was I think very improperly refused is the following:

CASE XLIII.

(31 Louisiana Annual R. 757.

Scott Watson, Sr., died in 1859, leaving a widow and minor

children, and the widow was confirmed as natural testatrix of her children. In 1866 the children were sent to France to complete their education. One of the children, Scott Jr., who was then 19 years old, and was described as "the brightest boy in school, both mentally and physically sound," was brought home two years afterwards in a condition of mental idiocy and imbecility and has since so remained.

It 1878 the parish judge of Tensas made a decree of interdiction. In these proceedings it was shown by the testimony of two physicians, who had examined him the previous day, that he was very weak in mind and body and was unable to take care of his property. That he was suffering from dementia. On behalf of the mother it was shown that he was very tractable. That the only violent propensity he exhibited was cutting his clothes. That he ate with the family and had perfect freedom of action ; and that he manifests a very warm love for his mother.

On appeal to the Supreme Court it was held that the evidence adduced was not sufficient to warrant the interdiction.

CASE XLIV.—APPLICATION FOR DISCHARGE FROM ASYLUM —NOT GRANTED.

Commonwealth ex rel Dr. Helmbold *vs.* Kirkbride, } 11 Philadelphia R. 427.

Dr. Helmbold who had been regularly committed to the Penna. Insane Asylum, made an application to be released therefrom, denying that he was of unsound mind. There was, however, as the Court stated, a preponderance of evidence to prove his insanity, and it was also shown that he had during five years been committed to insane asylums four times ; also that his insanity was hereditary and that two brothers and an only sister were then confined in insane asylums. None of the testimony is given in the opinion.

On the grounds above stated the Court refused the application.

The testimony of insane persons is usually not received in Court, and a recent decision is that of

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CASE XLV.

Hand *vs.* Burrows, } 3 N. Y. Monthly Law Bulletin, 6.

Application for a commission to take testimony of a witness confined in an insane asylum :

Held, that if the witness is sane he can be produced ; if insane, his testimony cannot be received in a court of justice.

By some judges the insane person is permitted to testify in his own behalf, his evidence going for what it is worth with the jury.

Concealed Insanity.—In some cases lunatics will conceal their insanity when upon the witness stand, so that their incarceration may be looked upon as an outrage, and their release may be promptly induced. If, however, a person familiar with their delusions properly interrogates them, the barriers of self-restraint are broken down and the justice of and necessity for their detention becomes evident. A stout, healthy looking Irishman was brought into one of the Courts upon writ of *habeas corpus* several years ago. He answered the questions propounded to him in a manner at once ready and intelligent, and the lawyer proceeded to shake his head knowingly and comment upon the "burning wrongs." The Superintendent, who had waited patiently, begged permission to ask the prisoner one question, and it was reluctantly given. It was simply "who did you say you were ?" Without a moment's hesitation the witness growing flushed and excited shouted out "I am the Lord Jesus Christ," and launched forth into a furious exhortation. This man, it is needless to say, was promptly sent back to the asylum. He was a violent and dangerous lunatic, believing that his change in identity gave him power to inflict such punishment as he saw fit.

The Popular versus the Scientific View of Insanity.—In many instances it is difficult to make an ordinary jury acknowledge the existence of lunacy, for the average layman has his own idea of what a madman should do, and all the finer distinctions go for naught. Until the time arrives when it will not be considered necessary for an insane person to tear his hair or drivel, or indulge in the violence which is found only in novels and on the stage, we may expect to find juries more often wrong than otherwise.

A case where the jury were completely deceived by the patient came under my observation a few months ago and the ludicrous termination of the affair is worth recording. A certain man of respectable family and in comfortable circumstances entertained an idea that he was an apostle, and hired a hall in the Bowery to which he invited the young women and men

from the streets, and the result was that the place was crowded night after night with a turbulent crowd of young thieves and prostitutes. Robberies of articles upon clothes lines in the neighborhood were committed and the police were called in. In consequence the proprietor was arrested and brought into court and committed to an Asylum, as it was believed his conduct was that of an insane man. His religious views were novel in the extreme, but the jury before whom he subsequently came in lunacy proceedings for *habeas corpus* were not disposed to consider him necessarily insane and he was discharged from the custody of the Asylum. He, however, of his own volition went back to the Asylum where he staid despite the efforts of the Superintendent to get rid of him, and his behavior was clearly that of a lunatic. He threatened to sue the physicians who committed him unless they gave him the opportunity to deliver his peculiar address before one or more medical bodies. I examined him and found the well marked symptoms of early general paresis. He had delusions of power, and had a confidence in his own capability as a reformer that was refreshing. His theory in regard to the *Immaculate Conception* was that it was through a kiss, and he proposed to do away with the ordinary method of intercourse and substitute a plan of his own, which was in every way to be more pure. The patient was liberated upon application of a lawyer who was one of the strongest agitators in the movement which was directed to open the doors of lunatic asylums, and his interest in his client was very great. He, however, received a rude check when he presented his bill for professional services and the client proceeded to issue bonds and bank notes for its payment, which he made with a pen and whatever scraps of paper he could lay his hands upon. This man has since committed suicide.

Feigned Insanity.—We are called upon very often to decide the question whether a certain alleged lunatic is shamming or not, and sometimes the task is one of great difficulty. The ability to detect a simulator depends much upon the experience, the shrewdness and the patience of the medical man. He should not only examine the person's behavior presented during the interviews, but cause him to be closely watched ; and his actions for some time previous to the examination should be investigated. The medical man is also to make careful physical examinations, the pulse and urine often furnishing striking indications. The greatest difficulty of the simulator of insanity, and in fact of all feigned diseases is the inability of the patient to

keep up his deception, especially when he believes he is not watched. Sometimes he will overdo the part he strives to play, or at others will act upon a hint purposely conveyed without his knowledge. Such a case is that reported by Montigna. Several physicians examined the individual and purposely in his hearing, expressed their doubts of his insanity for several reasons, one being that he retained the nourishment they gave him, the second because he had not smiled, the third because he had not fixed his attention upon any object. The ruse succeeded and he changed his methods in a way to remove all doubts of the physicians, following their suggestions as closely as he could.

Snell says: "Common people have not the slightest rational idea of insanity. They believe that all mental manifestations are completely altered in it, and that an insane person knows nothing; that he ceases to read, to write, and to reckon and that all his relations and conditions are completely reversed, hence it happens that all uninformed people find it difficult to acknowledge actual insanity. When they speak of an insane person, thay say that he is not mad, that he knows every one about him, and that he altogether conducts himself like a reasonable man, only that he shows some peculiarities. Uneducated people have the idea that an evil spirit, as it were, takes possession of an insane man, and drives out his being into altogether new and perverted elements. When they observe memory, reflection, feeling of right and wrong, they think that insanity cannot exist and yet among the insane all these things are seldom altogether wanting and often exist to a high degree. On this rock simulators generally make shipwreck if they attempt a part at all active. But it is more difficult to form a judgment if the simulator preserve a complete passiveness and an obstinate silence. It is not impossible that by these means insanity may be simulated with success, yet in order to do so the simulator must possess a rare strength of will in order, through all observation and tests, to preserve his role."

There are certain well defined features of real insanity the simulator cannot counterfeit, however skillful and cunning he may be. He cannot remain watchful any great length of time, he must eat and he can never voluntarily present the pulse and temperature changes of melancholia or mania. *Gavin says

* *Zeitschrift fur Psychiatrie*, Dec. 1855, quoted by Bucknill and Tuke, p. 470.

*P 170.

on feigned diseases: "On points directly involving his interest, the impostor will display the full endowment of the shrewdness compatible with this condition, while his stupidity is reserved for occasions where his interests are not particularly concerned, his replies notwithstanding his imbecility, never tend to criminate himself; but whatever he says, is rather meant to induce a belief in his innocence; and this game he pushes as far as he dares."

Ray states "that where the person replies to inquiries in such a manner as to criminate himself, it may be pretty safely concluded that the imbecility is genuine; and though the converse of this rule may just be equally true, yet if the whole tenor of his replies be of an exculpatory turn, strong ground of suspicion, at least, is afforded, that all is not right."

The nature of the act itself, which is alleged to be of an insane nature, should be taken into account, with the possible existence of motives, the possibility of a desire for revenge or gain, the existence of an unfortunate and unprofitable business contract, or the desire to escape some disagreeable duty are suspicious circumstances and may suggest the groundwork for perjury. The possible existence of previous symptoms, if any, will throw some light upon the present condition of the person, and the various questions of heredity, the history of head injury and the presentation of symptoms alluded to upon a previous page are to be weighed, although, so far as heredity is concerned, it will be found that many vicious criminals have a well marked nervous saturation from transmitted taint from insane ancestry. Macdonald and others allude to the fact that there is an absence of the change of character so universal in insanity; so, too, he points out that the alleged insane act is suspicious if it is the first evidence of the insanity—"an act of violence is never the first symptom of insanity." The simulator of insanity will indirectly repudiate all knowledge of persons with whom he was, perhaps, formerly intimate, though he may know the names of officers of the jail where he may be confined. He shows an *eagerness* to avoid the recognition of persons which is too marked to be natural and usually springs from an obstinacy which he adopts, believing it necessary to keep up this form of ignorance. Ray calls attention to the fact that the impostor's interest in his family does not lessen.

A forgetfulness of names and dates is very suspicious, especially if in the course of a long conversation the malingerer has given them correctly upon a previous occasion, or if he pleads loss of memory as a result of disease.

The simulator will often disclaim any knowledge of what he has done or what he is doing. He will, perhaps, say that he has delusions, and that he acted under their dominance. The absurdity of this becomes at once apparent, for, as Casper says, "the instant they acquire the knowledge that their delusion is a delusion it ceases to exist as such." In fact, the real lunatic will not admit that he is insane.

Feigned Mania.—*Mania* is often shammed, and usually by persons of mediocre intellect, the consequence being that the popular idea of madness is carried out, and detection is the invariable result. We find that such persons overact. No pretended delusions are too extravagant, and the malingerer's conduct is entirely too violent to last. The real victim of true mania presents physical symptoms which are beyond the simulator. The quick pulse, the furred tongue, and the dry skin are indications that are in themselves almost conclusive. The person who thrashes about to carry out his idea of mania sweats profusely. This, coupled with profound sleep after great exertion, Bucknill considers to be more than suspicious. Under certain circumstances various tests have been applied such as the administrations of anesthetics and corporeal punishment, but these are not always to be recommended.

As a rule, the patient who is feigning mania is very apt to try his hand in other directions and may manifest the symptoms of melancholia; after all, inconsistency is the feature of the deception.

Gavin, * whose article upon feigned insanity is the best of which I know, says:

"The real monomaniac never troubles himself to make the subject of his delusion accord with other notions having relation to it, and the spectator wonders that he fails to observe the inconsistency of his ideas, and that when pointed out to him he should seem indifferent to or unaware of this fact. In the simulator, the physician will discover an unceasing endeavor to soften down the palpable absurdity of his delusions or reconcile them with correct and rational notions. This marked anxiety to produce an impression is widely different from the reserve and indifference of the real disorder, and will of itself furnish almost conclusive proof of simulation."

The peculiar bodily odor so marked in mania is absent of course when the disease is simulated. The clothing and bed-

* Ray's Medical Jurisprudence of Insanity, pp. 318, 319.

covering always become impregnated with this, and it is, of course, most distinct in the morning after the room has been shut up. Esquirol, Barrows, Knight and Hill all place great reliance upon this test. The greasy appearance of the skin, so marked in some patients, or the scurfy dryness are disease manifestations which are absent in he who shams.

The simulator rarely feigns **Idiocy**, and if he attempts to do so he cannot succeed. The physical deformities are beyond his reach—the shape of the head, the teeth, the ocular symptoms. If we have any doubt it is only necessary to inquire into his previous history.

Imbecility is a condition that is still likely to be simulated. Le Grand du Saulle calls attention to the fact, however, that the imbecile may for a purpose—to escape punishment, for instance,—sham and feign more grave conditions. The case of Guiteau furnishes us with an example of this kind. Of weak, vicious mental organization, he, when threatened with punishment, clumsily resorted to methods of simulation which he believed would at least convince one or more of the jury of his insanity. His so-called delusions were innumerable and always expressed dramatically in court. He was "God's man."

In jail he was a very different person and never manifested any such nonsense; his pulse was regular, his bodily functions good. He never attempted to deceive those who visited him who he knew were able to see through his tricks. (See previous page).

Feigned Melancholia.—Melancholia is seldom shammed, although certain forms, notably those characterized by a fixed delusion, might be feigned with comparative ease. Gavin says of this: "The true melancholic seeks to shut up within himself his sad ideas, or at least he speaks but little of them, and betrays himself less by his discourse than by his physiognomy, his countenance, gestures and whole external habit. The signs indicative of it are the more apparent the less he believes himself observed. The contrary takes place in simulated melancholia, unless one has got to deal with an experienced impostor. The simulator is deficient in the presiding principle, the ruling delusion, the unfounded aversions and causeless attachments which characterize insanity. He is unable to mimic the solemn dignity of characteristic madness, nor recurs to those associations which mark this disease; and he wants the peculiarity of look which so strongly impresses an experienced observer."

Feigned Dementia.—Dementia is more often feigned than melancholia, but not so frequently as more dramatic and noisy troubles. The simulator will be apt to be ignorant of the fact that memory in regard to recent events is affected in the disease, and that the remembrance of remote events is fairly good. He cannot possibly consistently carry out the deception when he attempts to feign the incoherent loquacious stage of the disease.

It seems hardly possible that any one would attempt to sham the mental symptoms characteristic of organic disease of the brain, but such a case occurred. In several of the English works upon medical jurisprudence the case of Jaikes is published, who while under trial for picking pockets fell in a pretended apoplectic fit, and when he returned to consciousness feigned hemiplegia and secondary dementia so successfully as to deceive several medical men, who recommended his commitment to an asylum, from which he subsequently escaped. This, however, is an exceptional instance.

Ray alludes to the fact that no matter how skillfully dementia may be counterfeited there is always a kind of hesitation upon the part of the person who feigns, which suggests deliberation of what he will do next. He *halts* so that his exaggerated ideas do not succeed each other as they would in true dementia nor so rapidly. Forgetting the fact that the excitement of dementia is continuous, he falls into the error of assuming a kind of periodicity.

Criminal cases are numerous when insanity is feigned. To a man who has no defense the assumption of the insane state is a natural way out of his difficulties, and it cannot be denied that many of the persons that are sent to asylums by judges and juries are mere impostors.

Case XLVII.

The Barr Case.—Dr. Walter Channing reports the following case of feigned insanity which created a great deal of interest at the time of trial:*

"It is doubtful whether William Barr, the subject of this sketch, feigned in the first place in order to be transferred to the asylum. In all prisons there is a class of incorrigibles who constantly chafe against discipline, and Barr was one of the worst of this kind. Becoming unmanageable in the prison he

* Boston *Medical and Surgical Journal*, May 23, 1878.

was sent to the asylum for the relief of the officials. The first we hear of him is at Clinton State Prison, at Dannemora, N. Y., to which he was sentenced in 1871 for ten years for highway robbery, and from which, after remaining nearly a year, he was transferred to the State Asylum for Insane Criminals at Auburn. Here he remained nearly two years, the last seven months of this period being under my observation. From the asylum he was sent to the Auburn State Prison, staying nearly six months, when he again entered the asylum, remaining nine days. He then returned to the prison again, where he staid until some time after the homicide, which he there committed. During this period he has a history for violence and intractability, but all the very conflicting evidence given upon the trial furnishes no clear proof of insanity.

"In February, 1877, Barr murdered a prison keeper named Casler, who, it is stated, had borne an unusually good reputa- as a keeper, and beyond reporting convicts for bad behavior had never had any trouble with them. The circumstances of the murder were substantially as follows :—

"Barr was one of a gang of convicts shoveling snow off the sidewalk in front of the prison. The gang was in charge of Casler. Whenever a woman went by Barr would stop and smile at her ; he would also neglect his work and walk up and down the sidewalk. He began after a while to throw snow in the gutter, which the keeper told him not to do ; he talked to another convict, which the keeper also told him not do ; finally, the keeper told Barr that if he did not stop he should send him in, but Barr said he would go when the rest did. The keeper wrote a note, which Barr probably supposed concerned him, and sent it by another convict, and then turned his back to Barr, and began talking to some passer-by. Barr ran up and struck him with the edge of his iron shovel on the side of the face. The blow knocked the keeper over. Barr followed it up with three or four other blows and kicks, until another convict told him that he would kill him (Barr) if he did not stop. This threat made him desist, and he was taken into the prison. The keeper expired in a few moments.

"The murder created the most intense excitement in the town, not only because of the brutal manner of the killing, but because the murderer had twice been an inmate of the Asylum for Insane Criminals. The latter fact was noised abroad in the papers. The feeling became generally prevalent that Barr was insane, and public judgment was biased to a most unreasoning extent by prejudice.

"He was indicted for murder, and in October last was arraigned for trial. He made no reply when asked the usual questions and his counsel interposed the plea of insanity as his sole defense." * * * A commission in lunacy to examine into the mental condition of the prisonor was appointed. After an extended investigation they found that Barr was sane both at the time of the homicide and when they examined him. It would appear at first sight that the finding of a commission of experts might so definitely settle the question of insanity that it could no longer be an element in the defense. If the prisoner is insane he may be remanded at once by order of the court to an asylum. By so doing the expense of a trial is avoided. When, however, a commission finds the prisoner sane the defense of insanity can still be used, and the finding of a commission, beyond a certain moral weight it bears, is of no service.

"Barr's counsel accordingly used insanity as his sole defense. Portions of the evidence taken before the commission was read simply as the testimony of certain persons. The trial lasted a week. The jury stood at first nine for a verdict of guilty and three for acquittal on the ground of insanity; a verdict of murder in the second degree was, however, finally brought in, and Barr was sentenced to prison for life. He received his sentence with stolid indifference. On being told that he had got off very lightly he said he did not care. At the prison, when received there from court, he was asked why he didn't recognize some of his old keepers; he replied that he wasn't recognizing any one *then*.

"Reviewing the evidence given in this case, it will first be found that the reasons of the physician at the state prison at Dannemora for transferring Barr to the asylum were contradictory. He makes a diagnosis of one form of insanity, acute mania of several months' duration, and then says he was melancholic. He shows that Barr was insubordinate, violent and noisy, but considering his low, brutal nature these acts are not necessarily indicative of insanity. * * * He was afflicted with a cerebral hyperesthesia, and was in a state of constant nervous erethism, ready to explode at any moment.

"The first year and a half of Barr's residence at the asylum is a blank; we know only that he was still vicious and insubordinate. During the seven months of my observation of him there I always found a cause, however trivial, for his bad behavior. Generally when his passion subsided he would acknowledge that he had done wrong, and promise to be good,

and actually did better for a few days. Among the patients he had found several old pals. These he often incited to mischief, and endeavored to make them join with him in fights and attempts at escape, thereby showing a power or desire of combining which in the lunatic would almost never be found. The necessary lack of severe discipline at the asylum, the association with the weak and sick insane, and all the surroundings, so different from a prison, did much to develop the ungovernable elements in Barr's character. He learned his vast power of evil and freely exercised it, considering himself irresponsible because a lunatic.

"Leaving the asylum and going to the prison his conduct does not improve ; he is called a 'luny,' and his behavior regarded as that of an insane man. He whistles on Sunday in the chapel, but is not punished, as the warden says he is not 'all right.' (But only a short time before this a convict had done the same thing, and said that the devil was in his cell, and had been sent to the asylum. There he confessed that some feigners who had previously been in the asylum told him how to 'play crazy.' Barr knew these same persons, and without doubt also knew this recipe for insanity.) Finally, after threats to kill several persons (he said he would get over to the asylum again if he had to kill a keeper) and various acts of insubordination, the prison physician certifies that he is the victim of melancholia and paroxysmal mania and again he enters the asylum. There no vestige of either can be discovered ; he is bright, perfectly well, and tractable until some trifle makes him angry. He thinks, however, himself, that he is insane, and says his head is not right ; but the insane do not think themselves insane.

" Again he goes to prison, behaves somewhat better, and for two months before the homicide the warden hears nothing of his insanity.

" The circumstances of the murder were horrible, but still more terrible and unjustifiable murders have been committed by sane men. The keeper had made Barr angry, and it was natural that a man with his temper should raise whatever he might have in his hand and strike with it. More might be said on this point, but it seems unnecessary. Barr gives his reason for having struck the keeper, saying that he would not be imposed on, and the keeper was imposing on him.

" After the homicide he no doubt has the old feeling that he is regarded as insane, and he is still very violent and troublesome when irritated. He now speaks occasionally of devils. At the

county jail he is at first troublesome, but on being punished his manifestations of violence cease. This change alone is strong evidence of sanity. A person violent enough to be yelling and whistling sufficiently loud to disturb the neighborhood would be affected with violent mania, and punishing such a person would have no other effect than aggravating the symptoms. As the time of the trial draws near he becomes quiet, and knows and talks with almost no one. If he does talk it is to speak of devils. The idea of seeing spirits and devils is one that generally occurs first to ignorant people. Barr seems to realize that his knowledge is too limited to allow him to feign the violent forms of insanity, and he therefore fixes on the stupid, quiet, non-committal form.

"'The feigner generally mixes the appearances of several forms with each other, so that an unnatural representation of disease is offered. He usually overdoes the phenomena of mental disturbance. He believes that all must be reversed; instead of giving expression to delirious ideas he talks absurdly, and conducts himself as if in insanity the greater part of the intelligence and of the memory must be disturbed.'* Barr is interested in his trial, prepares himself daily for it, and is impatient when it does not begin. Here is showing interest, attention, and muscular activity; but he gets into the court-room and is too demented to answer the simplest questions, or obey even the direction to stand up. At the same time he keeps his body in perpetual motion, laughs and mutters to himself, disturbs the order of the court, and creates a scene by a tremendous struggle with his keepers; here again he launches into mania.

"The following extract from a conversation of Barr with the commission is very striking, resembling in many respects reported conversation with other feigners:—

Q. How old are you? A. I don't know, sir. Q. Were you born in this country? A. I don't know. Q. What is your name? A. Barr. Q. What is your first name? A. William. Q. Your brother's name? A. I ain't got no brother. Q. What was your mother's name? A. I don't know sir. Q. You say you don't know where you were born? A. No, sir. Q. Do you mean to say that? A. No, sir. Q. Where were you brought up? A. The devil is all the time talking to me. Q. Do you know Captain A (a keeper at the prison)? A. No. Q. Do you know Captain B? A. I don't know any of them at all. Q. Do you know Captain C? A. No. Q. Do you know Captain D. A. Where? Q. Do you know Captain E? A. No, sir. Q. Do you know your brother's name now? A. You know the devil is all the time talking to me about. Could hear him well enough, and I

* Griesinger, page 120.

don't want to hear. That is the matter. Q. You say the devils are all the time talking to you? A. Yes, sir; you know. Q. What do they say? A. They won't let me rest. Q. Tell this gentleman what they say, and he will write it down. A. I don't want it written down. Q. Can you read or write? A. No, sir. Q. When did you forget to read and write? A. You will all write too. On another occasion he was again asked where he was born, and replied, "I guess so; what do you want to talk to me for?" The question was repeated, and he said, "What are you talking to me for? There are seven hundred thousand devils flying around all the time; you know what they say."

"Barr says that he cannot read or write, and with the exception of two questions answers all wrong. Some of his answers are responsive, but many irrelevant and absurd. He knows his own name, but neither his father's nor his mother's. When asked his brother's name he is afraid, no doubt, that his brother may be found, and says 'I ain't got no brother.' When asked if he knows certain persons he gives incorrect and different answers. His replies are nearly all in the negative, as if he had resolved to respond in that way. He also tries to drag in devils in his irrelevant answers, but he shows no originality in so doing, always repeating almost precisely the same words. He merely says that he sees or hears devils, but can go no further, though especially interrogated to do so. In true mania the lunatic under similar circumstances would rattle on with the most perfect volubility, soon changing to other subjects probably, if the attack were acute; if chronic, talking rationally and connectedly of his delusions, and even in many cases answering other questions properly. Barr's apparent delusions and hallucinations cannot, therefore, for a moment be dignified with the name of mania, and his absurd, almost always false, but often responsive answers, instead of showing the mental weakness, as loss of memory and attention, etc., of dementia, indicate a consistent and well-sustained effort willfully and wrongly to answer all questions. When he answers two questions correctly, giving his first and last names, he is evidently surprised into so doing. Barr in court presents the picture, to a limited extent, of advanced dementia and violent mania, incompatible, of course, in themselves. As expert testimony is given, showing the inconsistency of his actions, he changes according to what has been said. He has never looked any one in the eye, but on hearing that real lunatics do so he does the next day. Though too stupid to recognize any one, he eyes persons he has known very sharply, doing this when he supposes himself unobserved. If demented, his circulation would be sluggish, his hands cold, etc.; if maniacal, more active

symptoms, slightly quicker pulse, loss of flesh and sleep, would be present ; but his general health is good, his weight normal, and he sleeps well. The latter fact is of special importance as still further excluding mania.

But the other side of the picture is seen most distinctly when Barr is in his cell at night. Here the most plain, positive, and convincing proofs of Barr's feigning are brought to light. The poor lunatic, too demented to know his father's name, his own age, where he was born, etc., or to read and write, or to understand what is said to him, or to recognize one person out of many he has known, converses with the convict in the next cell, an old friend, after the other prisoners are asleep. Sometimes this conversation is prolonged until he tells the other 'shut up; I must go to sleep.' Barr borrows papers of him, which he reads, and tobacco and cigars, which he also uses. The other convict writes him a note, and he replies, calling him by his right name and signing his own. He finds out that the other has 'told on him,' and he is angry. In these and other ways he is the same old Barr, interested in what is going on, enjoying the luxuries of life, at times irritable, but perfectly rational and true to his own nature."

CASE XLVIII.

The Waltz Case.—The Waltz murder case is one which gave rise to much controversy some years ago. The facts of the homicide and the subsequent behavior of the prisoner are thus detailed by Dr. A. E. Macdonald.*

"On the first of May, 1873, Joseph Waltz killed an itinerant knife-grinder who was stopping at his father's house, and buried the body, and part of the effects of the victim upon the farm. The method with which the crime was planned and perpetrated, and the care taken to conceal the evidences of it, all showed coolness, cunning and deliberation.

"Sixteen days elapsed before the discovery of the murder and of circumstantial evidence which seemed to implicate Waltz and his father ; and during those sixteen days his conduct betrayed no departure from his usual custom, and gave no evidence of non-possession of his faculties. 'He made bargains, transacted business, and kept careful accounts of his payments and receipts.' When the unmistakable evidence of his guilt was communicated to him, and he found also that his father was

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* *Am. Psychological Journal* May 1876

suspected of complicity in the crime, seeing that he could not save himself, and desirous of saving his father (who had apparently no connection with or knowledge of the murder), he made a complete confession, and being taken to the farm, pointed out the places of concealment of the body and of the property, where they were then found. In this confession he described minutely the details of his crime, relating how he went to the woodshed for the hatchet, how he entered the room where his victim was lying asleep, turning the lamp down and placing it behind the head of the bed, so that the light might not awaken him; how, 'warned by the inward pleadings of conscience,' he restrained himself and withdrew from the room. In a short time he returned, cautiously as before, and struck the man upon the head a single blow; then, as he still breathed, and 'doubting of its fatality,' he struck him twice again. He goes on to describe how he carried out the body, and hid it in the barn, but, reflecting that it would probably be discovered there, removed it, burying it near a fence and covering it with stones and subsequently taking it up, burying it in the orchard, and plowing the lot so as to remove every trace. He similarly disposed of the grinding machine and other articles belonging to the deceased. In this confession he ascribes his crime to the influence of evil spirits, controlling and directing him, and relates how he strove to resist their domination and prayed for delivery from them.

"Shortly before the arrest of Waltz, and while search was being made for him, some of the tools belonging to the murdered man were found upon the road at a distance from the scene of the murder, and upon a telegraph pole near by was pinned a letter, which turned out to be an announcement that the murder had been committed by a band of traveling highwaymen who had since left for other localities. Upon examination, the handwriting of this document proved to be that of Waltz, though somewhat disguised. In the confession from which I have already quoted, he admits its preparation, and describes a midnight journey for the purpose of placing it where it was found. He also confesses to the robbery of several school-houses at intervals prior to the murder, and to the fact that after the latter he concealed the proceeds of these robberies, 'for fear they should make suspicion.'

"Being committed to await his trial for murder, six or eight weeks passed without any noticeable change in Waltz's demeanor; he was quiet and well conducted, and no suspicion of his insanity was excited. At the end of that period a length-

ened consultation with his counsel was held, and it is said to have been concluded by one of them remarking, 'Well, Joe, I don't see what we are going to do for you unless we try to make you out insane.' If this remark was really made, the hint was not lost upon 'Joe.' At any rate, he forthwith began to manifest symptoms of insanity, real or pretended. A practical and efficient means of determining the true character of these manifestations was adopted, a paper was prepared in which a list of 'Signs of Insanity,' some of them fictitious and some extravagant, was given, and conveyed to Waltz by a person whom he supposed to be friendly to him. The paper read as follows :

"'Signs of Insanity.—A vacant stare at some part of the room as though the person saw something; screaming aloud occasionally as though they saw something like an enemy, an angel, a demon, or something terrible, accompanied by apparent fright. Skulking in a corner; furious and breaking everything to pieces within reach; resisting every effort to quiet them; turning away the face as though not wishing to be seen; frothing at the mouth; tearing the clothes; biting at their clothes and even biting their own fingers. When lying down a disposition to lie on the left side, or throwing the right hand over the head.'

"Shortly after its receipt he faithfully reproduced the indications specified.

"At the trial of the case the facts of the murder and the part Waltz assumed in it, were proven beyond cavil; and the verdict turned upon the question of insanity. In the court-room Waltz continued to present the supposititious evidences of insanity which he had learned from the paper, and was at first violent and furious. Later, upon its being whispered to him by one of the physicians that he was overdoing the thing, and hurting his case, he moderated his conduct, and was for two or three days quiet and peaceable. Later still he was told that he had gone to the other extreme and was too quiet, and thereupon he became once more excited. Now this was pretty conclusive proof of the sham nature of his insanity, but, through a legal objection, it was excluded, as it could not be actually proved that he read the paper. And it is better that the question should have been settled in a more scientific way, and one more open and above board. Although a murderer is not perhaps entitled to much consideration, still entrapping him into exposure by a subterfuge, perpetrated under the false pretense of friendship, cannot exactly comport with our notions of fair play. The paper and evidence connected with or resulting

from it being excluded, the question as to his mental condition was left to be decided by medical and general evidence. Of the four physicians summoned by the prosecution, three were positive in their opinion that the insanity was feigned, while the fourth gave a similar though less positive verdict. Two physicians appeared for the defense, and swore that they considered the prisoner insane, but their evidence was less positive, and not so well sustained, as that for the prosecution. The trial occupied over a fortnight, and that fact and the additional one that more than seventy witnesses were examined, would indicate that every opportunity of adducing proofs of insanity was fairly given. * * * After fifteen minutes' deliberation the jury agreed upon a unanimous verdict of 'guilty.'

"A doubt as to the prisoner's responsibility still existing in some quarters, such representations were made to Governor Dix as led him to appoint a commission of experts.

"They found the prisoner a young man of twenty-four, well developed, and enjoying—as he had all his life enjoyed—good physical health. The statements of his father and friends showed that he had been steady and well conducted, fond of reading, and very capable in farming and business affairs. No singularities of conduct had ever been observed, and he had never been suspected of insanity, or any tendency to it. When the commissioners visited him, they found his cell well supplied with papers, and containing a few books, including an English Dictionary. Upon the wall were drawings of geometrical symbols, and other figures, and passages of Scripture and scraps of rhymes, some original and some quoted. On accosting him he stared at his visitors, without replying, save by a sort of guttural sound. He then moved about from his bed to the floor, sometimes kneeling, and sometimes lying down with his face to the wall. At first he gave no answer to questions, but afterwards answered them in a confused way. For instance, he asserted that he did not know his age; didn't know his mother's name; didn't know what church his father went to. He said he was married to the Queen of the Lunarians who had come to his cell one night, and being asked what he meant by 'Lunarians,' he replied it was something about the moon, and, taking the Dictionary, turned to the word 'Lunary.' When questioned about his trial, he said:

"'*I was tried in summer; wore an overcoat; tried in an immense crowd; thousands of people; not in the court-house; never knew of a court-house; never saw one; went through the door with supernatural strength; counsel? counsel? I had no coun-*

sel; no judge was there, but a man was on the throne, who talked too much.' He then said to one of the commissioners, '*You are the governor*,' and to the other, '*You are a judge.*' He denied ever coming to Catskill, or doing any business. Said his mother bought his clothes for him. In reply to a question, he said, '*I killed a man once, oh, yes, he was a good man, he never swore, never got drunk; I never made a confession.*'

"Being finally told that there was no necessity in his feigning and so stupidly, he instantly replied, '*Feigning! Feigning what?*' Being further told that his assumption of entire ignorance of the simplest things and complete loss of memory, were inconsistent with his state of health, intelligent appearance, and the books and papers he had about him; as also with his being engaged in writing in them and the prompt use of the dictionary, he said, '*Are you strangers? I don't know whether I ought to talk to you.*' He then confessed to his feigning and said he would tell all about it, and at once threw off all simulation. Questioned as to the homicide, he repeated the substance of the confession from which we have already quoted, and was very anxious to be taken out and to the scene of the murder, saying that he could explain the matter and point out the localities so much better if he were on the spot. He also described how he had accounted to his father for the absence of a blanket which, being stained with blood, he had buried with the body, by saying that Holcher (the murdered man) had carried it away with him; how, upon the strength of this tale, his father started by the road which Holcher was supposed to have taken in order to procure his arrest; and how he (Waltz)took advantage of his father's absence to further destroy the traces of his crime by burning the machine and reburying the body in a more secure place. He acknowledged that he knew at the time of the murder that he was doing wrong, but claimed that he was tempted and controlled by spirits. Finally he offered to bribe the commissioners, saying, 'If you help me with the Governor, I will give you all I have. I have between four and five hundred dollars, and an interest in the farm, and father will add to it.'

"The conclusions reached by the commissioners after a careful examination of the prisoner and consideration of the testimony presented at the trial were summed up by them in the following words:

"'From the foregoing voluntary and repeated confessions of the prisoner; from the evidence adduced upon the trial; from the statements of his father, and from a personal examination

of him under the light of past and present habitual demeanor, there is no escape from the conclusion that the prisoner at the date of the homicide committed by him, possessed all the elements of legal and moral responsibility, for he fully knew and comprehended the true nature and consequences of the act he was about to commit. He knew it to be both wrong in itself and a wrong to his victim, since he successfully resisted its commission for a while, by prayer and deliberation upon its enormity, thus evincing, by this power to choose between two courses of conduct, that he was a free moral agent. Therefore we are of the opinion that the homicide was the act of a sane mind, knowing that the act it was about to commit was a crime; intending so to commit it, and, with full power of refraining from or executing its wicked purpose, deliberately preferring to do the latter.'

"These conclusions, following and emphasizing those to the same purport reached in succession by the physicians who examined Waltz before his trial, by the judge who presided thereat, and by the jury which convicted, very properly led the Governor to decline to interfere, and Waltz was duly executed upon the anniversary of his crime. Upon the day before his death, he added another link to the chain of evidence in favor of his sanity by killing his keeper, in a manner showing premeditation, caution, judgment and motive—the desire to escape. The assault was made with a bar of iron, torn from the floor and bent at the end to give it greater weight; the occasion was sought when the keeper lay asleep on a lounge; the pools of blood upon the floor were concealed by newspapers spread over them; and Waltz, taking possession of the keeper's keys and revolver, was only prevented from using them to effect his flight by the timely arrival of other officers."

Persons feign insanity at times when they desire to avoid meeting obligations they have contracted. Casper presents two or three of these cases in the first of which insanity was feigned to escape conviction for perjury. "The wife of a merchant, L., had ordered clothes for her son in January, 1849, and in a subsequent action for non-payment she declared on oath that she had no remembrance of having given any such order. The circumstances occasioned a suspicion of perjury, but in the course of the investigation Mrs. S. alleged that she labored under a great weakness of memory. Charged with the task of investigating this matter, the following question was put me to answer, 'is the memory of the accused in such a state that it is with probability to be assumed that an order

given by herself during the year 1849 could be completely forgotten by the 20th of November, 1850, the day on which she took an oath to that effect?' Mrs. S. very soon betrayed herself, inasmuch as in the course of an apparently indifferent conversation with me about matters wholly unconnected with the investigation, she gave the readiest answers to questions such as, how old her husband was, the ages of her children, the diseases they had gone through, etc. Then I recurred to 'the unfortunate circumstances of this investigation, and its possible lamentable results,' and Mrs. S. did not fail to fall into this strain and to describe most feelingly her unfortunate position, her poverty, and the embarrassment in which she was placed by the giving of this oath, evidently to procure a favorable opinion from us. Consequently she herself involuntarily let drop the pretext of a weakness of memory, and brought forward evidently the true *causa facinoris;* she forgot herself, and ceased to keep up her character! Of course the foregoing question was negatived."

Doubtful cases of Feigned Insanity.—Sometimes we encounter very trying cases, real insanity being mistaken for feigning, but these examples are very rare. Casper refers to the case of "a youth of eighteen, who had commited several robberies, and was convicted of the crime of rape, under circumstances which brought his sanity into question. The investigation lasted for eleven years, during which period he was removed from one prison or asylum to another, and no less than twenty official medical reports were made on the state of his mind, most of which agreed in the conclusion that his insanity was feigned. The question was finally referred to the Royal Scientific Commission for Medical Affairs, who reversed former decisions, founding their opinions on the following facts, viz.: persistent silence, lasting for fifteen months; continued exposure of his body, without covering, to the cold, although clothing was within his reach; vigilance kept up night after night; complete rejection of food; swallowing of dirty water in preference to clean, or of hard innutritious substances; frequent attempts to commit suicide by venesection; no betrayal of himself on recovering from drunkenness or after inhalation of chloroform; duration of all these symptoms for so long a period (although the subject of them, if sane, must have known that simulation was only lengthening the time of his imprisonment); and, finally, the existence of unquestionable delusions."

CHAPTER III.

HYSTEROID STATES, AND FEIGNED DISEASES.

Medico-legal Consideration of Hysteria.—*Hysteria* often plays a part in the court-room and in the police station, and very often is not recognized. Some one has said that it is the first cousin of insanity, which is only too true, and when responsibility is considered, we are furnished with a perplexing psychological problem. In cases of blackmail, pretended assaults upon the person, alleged burglary, and a variety of other crimes, it will often be found that what Lutaud defines as "a morbid excitement of the genital organs and a derangement of the senses and imagination," will often explain the motive of the person who brings a charge.

Nature of Hysteria.—The true sign of hysteria is the perversion of the affective faculties and ideation, and the need of voluntary resistance. Le Grand du Saulle, in an admirable paper, says: "Dr. Constans has not hesitated to represent the greater part of the hysterical patients at Morzines as being absolutely irresponsible for their actions. Now, an affection which is but the expression of a peculiar susceptibility of the nervous system, and not a mental disease, can very rarely overpower moral liberty and exclude all culpability. Hysteria shakes the cerebral edifice, exercises a powerful influence, if you will, over the emotional faculties, and sometimes ends by inducting a true lesion, but ordinarily the intellectual faculties remain intact." *

Most authors agree that the cases where irresponsibility is greatest are those met with among young girls in whom the melancholic tendency is hereditary, and in whom actual insanity supervenes. In such cases the intellectual development is arrested, and usually so at puberty or at some equally important period.

Hysteria and Lust.—Cases are on record, and Tardieu

* On Partial Responsibility, etc. Translation in Psychological Journal, vol. 16, p. 668.

furnishes an example of women who prostitute themselves without reference to the social condition of the male; and he furnishes the case of a young Austrian noblewoman of great beauty who offered herself to every man she met, even to the lowest street character. She subsequently decapitated her child, and did not appreciate the nature of her criminal act.

I have lately seen a young lady of excellent family the subject of hysterical insanity who offered her person to male servants, railway porters, and persons far below her socially, and another case of the kind dependent upon some sexual irritation caused the unhappy victim, the morning after her marriage, to seek the caresses of her coachman. In both these cases there was attendent intellectual perversion of other kinds which rendered both the young women irresponsible for their conduct.

Hysteria Manifested in Religious Vagaries.—The recent case of Lizzie Gannon is a curious example of what one would rather look for in the last century than to-day. Lizzie Gannon, a child of eight or ten years, became hysterical and presented the various trance states which were exhibited by Louis Luteau in France and other *stigmatised* patients. A feature of her condition was the worship of certain paper dolls, and when the ministrations of a sensible Catholic priest were solicited, he promptly took the things away from the child. The testimony of several witnesses was printed in the New York *Times* of April 7, 1883.

"The trial of the suit against Archbishop Williams and a curate for alleged injury done the sick child Lizzie Gannon by depriving her of paper images which she idolized as 'angels,' was continued to-day in the Superior Court. Further evidence was introduced by the prosecution to show that the girl's acutest sufferings were immediately subsequent to the loss of these images. The mother of the girl was further examined, also a couple of schoolgirls, a sister of the mother, the girl's father, and a few others who testified to an intimate acquaintance with the family. The principal testimony was that of Mary E. Ryan, the sister of the sick girl's mother. The witness testified that she slept in the room with the child. The latter was in the third trance when she first produced the 'angels.' Some time after the child showed her the box in which they were kept. The child took them out and kissed them. Witness said that she never saw any thing more beautiful. 'They had short, curly hair, and were about an inch long.' The child said that 'Frankie' had sent them to her. 'Frankie' was the

brother who had died and for years before his death was an invalid requiring constant care. This witness described in detail the visits of Father Fleming, as others had done. The priest refused to return the images which he had in his possession, because he said the Church condemned idolatry, and at length refused to have any thing further to do with the case, considering that some bad influences were at work. He declared it to be a case for the insane asylum, Carney Hospital, or the Sisters. This witness also told of the child seeing the vision of the Immaculate Conception!

"William H. Gannon, the father of the child, testified at great length of his interviews with the Archbishop, and his repeated demands for the child's images. Concerning the effect of the priest's course upon the child, he said that she held her voice until April, 1880. From the very first there were one or two persons who could restore her voice temporarily. In December, 1880, she became totally speechless. Then for a time she lost her sight and hearing. After a while, he said, the thing got into the papers and many people visited the house, among them some Spiritualists. People made it a point to see if some one could not take her by the hand and restore her voice altogether. When Mr. Fleming took her by the hand she could speak. They managed to discover a means of rousing her, and she recovered her eyesight and hearing and the muscles of her neck relaxed. At present she is without speech and cannot be left alone; she cannot walk more than a quarter of a mile; when she puts her head on a pillow she goes to sleep and cannot be roused. She will not be left alone, and she manifests the loss of her angels by trying to speak and in writing. The want of them has a very depressing effect on her. The witness declared that neither he nor his wife had any idea where the images came from, but he thought the child was under a delusion in respect to their supernatural origin. He insisted that Father Fleming's action with the images was the direct occasion of his child's extraordinary troubles. She had a slight delusion about them before the priest came, and they were taken from her in such a way as to increase the delusion. By proper management of her case he believed she could have been cured of her delusions.

"Dr. M. Hodges, the physician who attended the girl, was called and testified. Her disease he pronounced to be profound hysteria. The disease would probably be aggravated, he thought, if she were surrounded by a superstitious atmosphere. One of the traits of the disease was to deceive, but with no in-

tent on the part of the patient to deceive. He thought it dangerous to accept as facts any statements made by a person in that condition. It was not an uncommon phenomenon for a person to lose power of speech for a longer or a shorter time. He advised the removal of the child from her surroundings, but this advice was not followed because the family thought they could take better care of her at home. He was not prepared to say whether the possession of the images would or would not increase her superstitious delusion.

"Dr. Walter Channing, an expert witness, was of the opinion that the child's condition was aggravated by the action of the priest and that it produced a 'moral shock.'"

Hysteria in Young Children.—In very young children even the presentation of hysterical symptoms is often very extraordinary. Recent and excellent illustrations of the disease originating before puberty are published by Dr. Butlin, (London *Lancet*, Jan. 17, 1871, p. 819,) who reported the cases of three children who for a long time successfully malingered so as to deceive their parents. The first of these cases was a girl aged seven years, who successfully simulated epilepsy and described her condition with great enjoyment. The case was cured by a "few sharp smacks with a wet towel." Rebecca N., aged nine and a half years, who feigned unconsciousness for a long time. She closed her eyes and apparently took no notice of her family and for two weeks had to be fed with a spoon. She would not get up, nor stand or walk and was a constant source of trouble. Her father, who appeared to be a sensible man, saw her get up and get something, and proposed firm discipline, but the mother would not permit it. She therefore was kept at home and kept up her comedy for some time, but was finally sent to the Children's Hospital. Dr. Butlin describes her progress as follows :

"About four weeks before admission her bowels were constipated for about a week. At the end of that period she again closed her eyes. Since then she had never opened them again, and had only spoken three words. She could not stand, and was subject to 'dreadful fits of trembling.' Often she wept quietly. She seemed to understand every thing that was said. Her appetite was good. She was said to be a remarkably smart child. Her general health was good ; her bowels were regular ; the menses had not appeared.

"On admission she was found to be a fairly nourished girl. She had a receding forehead, but her features were strongly

marked, and she looked considerably older than she was. Her face was pasty. She lay with both eyes closed, and the left hand in front of them. The under lid did not cease to quiver. The right hand lay across the chest, but raised up from it, and underwent a continual shaking or vibrating movement. The legs were drawn up and motionless. When the left hand was removed from before the eyes the lids quivered, and at times also the sides of the face, the movement being similar to that produced by galvanism. Any attempt to separate the lids was strongly resisted. She did not speak, but frequently nodded in reply to questions. She bore a remarkably hard pinch on the arm or leg without flinching or crying out, but the shaking movements were increased, and the tips of the fingers became covered with perspiration. When one arm was held the shaking of the other became more marked. The gums were spongy, the lips broken, the breath offensive, the tongue brown and dry; the pulse 116 and regular. She had a short hysterical cough. The inspirations and heart sounds, and the liver and splenic dullness, were normal. The bladder was distended, and on a vessel being produced she passed thirty-two ounces of urine, acid in reaction, of a specific gravity of 1020, and depositing phosphates on being heated. She was ordered two grains of calomel and ten grains of jalap powders and passed a good night.

"On the following day she cried a good deal. The bowels not having acted, the powder was repeated, and was followed on the third day by copious evacuations. Whenever she awoke from sleep, however suddenly, the eyes remained closed. She was ordered to have a shower bath every other morning, and a draught consisting of eight grains of chlorate of potassium, a drachm of tincture of valerian, and half an ounce of the infusion three times a day. An aperient powder was given occasionally in order to maintain the action of the bowels.

"Day after day passed without any material alteration in her condition, until, on the fifteenth day, the house surgeon, Mr. Sankey, taking a galvanic battery to her bedside, told her that it had become absolutely necessary to apply it until she recovered the power of speech. Having promised that as soon as she had distinctly pronounced the word 'mother' he would desist, he proceeded to apply the sponges, pausing every few seconds to demand the repetition of the required word. After about a quarter of an hour the girl's patience began to be exhausted, and she broke out into plaintive sobbing. The application was however persevered in until, at about the end of half

an hour, after two or three feeble articulations, she distinctly pronounced the word. From that time her cure was virtually effected; she resumed the power of speech; and although, on being placed out of bed she appeared to be quite unable to stand, in the course of the afternoon she managed to walk about the ward without assistance. Three days later the aid of galvanism was again resorted to to induce her to open her eyes. On the following day she read a book; in two or three days more she was running about the garden with the other children, and was shortly after discharged in good health."

"CASE 3.—Florence B.——, aged eleven years, ailing for a twelvemonth, but had previously been a perfectly healthy child. Her first symptoms were difficulty in walking and inability to hold herself upright. Then she began also to complain of pains in the stomach. There was no history of any injury. During the last five or six months she had been gradually getting worse, until she lost the use of her legs. She was not able to hold her water when sitting up. Her bowels were never open without injections. She still complained of pains in the stomach; but had very little pain in the back except when she was moved. Her appetite was very good, and she was in fair general health.

"When brought into the hospital she was fairly nourished, but emitted a peculiar mousy odor, similar to that sometimes observed in the insane. She was obviously very hysterical, calling out as if in pain whenever and wherever touched. She knew a great deal about what had been the matter with her, and remembered what the doctor, at home, said about 'her complaint.' Her tongue was clean, pulse 100, and face pale. She passed water without difficulty. Her appetite was good, and she slept well, but generally with legs drawn up. She complained of pain and tenderness in the abdomen. Her legs were fairly nourished, and, on measurement, were found to be of equal size. Her feet were cold. When made to walk she raised her legs slowly and with apparent difficulty. Sensation appeared to be still more impaired than motion, for she took little or no notice when the feet and legs were punched or pricked. No reflex movements could be excited. A sharp tap on the sole of the foot caused pain in the abdomen, but very little in the back. On examining the back, a very slight lateral curvature to the right side seemed to exist in the lower dorsal and lumbar regions, and some tenderness over the fourth and fifth lumbar vertebra; but no prominence could be observed

either in this or any other part of the spine. She preferred to lie on the left side.

"Although Mr. Smith suspected that her ailment was hysteria, he thought it safer to commence treatment as if her symptoms were due to a more natural cause. He therefore gave directions for the legs to be galvanized daily, and ordered two minims of the liquor strychniæ in two drachms of steel wine to be taken three times a day, as well as a pill containing a third of a grain of extract of aloes, two grains of compound rhubarb pills, and a sixth of a grain of nux vomica, to be taken once a day. In about a fortnight she sat up in bed, having been promised that as soon as she could stand she should walk in the garden. She complained of very little pain either in the abdomen or back; her bowels were regular, and the expression of resignation which her face had worn was replaced by a bright and cheerful look. At the same time she seemed to recover sensation in her legs, and for the first time gave evidence of feeling the galvanic battery. On the twenty-eighth day she began to walk about, and was very bright and talkative. On the thirtieth she walked quite firmly and without any pain; she complained of no pain in the abdomen, and of very little in the back. On the thirty-second day she was running about the garden playing with other convalescents, and in a few days more was discharged."

Hysterical Simulation of Real Diseases.—It is quite common for hysteria to simulate real diseases. The so-called *neuro-mimeses* includes those disorders which are counterfeited in the hysterical subject, and often in a manner to deceive the most observant. The involuntary expression of suffering is often free from any tinge of dishonesty upon the part of the patient. We find simulated joint and spinal affections which resist all remedies, and only disappear when moral treatment is attempted. A young woman recently came under my charge complaining of "rheumatism" and "spinal disease." She had worn a complicated spinal brace, and had used embrocations for the knee. When I removed the former I found no disease of the vertebral column whatever, as evinced by external appearance, and the rheumatic knee, "upon which she could not bear her own weight" was not swollen, red, tender, nor could I detect any sign of rheumatism. In this order of hysterical troubles belong the contractura and paralyses. The lay observer may often have his sympathies aroused by the appearance of the deformed patient. When such manifestations are claimed to

be the result of injury, the examination of the medical man cannot be too searching or sure, for often there are just sufficient indications of organic trouble to mislead. It should not be forgotten that these hysterical contractions are comparatively rare among men, that in women they are usually connected with ovarian neuralgia and spinal pain; that the contraction is modified by diversion of the attention, that the mental condition is peculiar, and we are to look out for great self-absorption and diverted emotions.

The influence of self-concentration in the production of disease is recognized by all who have occasion to treat nervous people. The maladies in men are not serious and rarely arise above the level of gastric disorder, but often an intractable voluntary paralysis may be due to this complete concentration of the patient's attention upon some particular trouble.

Wynter,* in his clever little book discusses the possibilities of morbid attention. "There is, however, a certain morbid attention, when directed towards supposed ailments of the body and mind, which is to be especially deprecated. A man may so concentrate his attention upon certain organs of the body as to create disease in them. The hypochondriac, for instance, never ceases to dwell upon the condition of his digestive organs, and the consequence is that he directs so much nervous energy to the spot as to cause congestion and actual disease. We see no reason to doubt that mere disordered functions of the brain may be converted by the same undue attention into positive disorganization and mental disease. Hence overstudiousness on these points is to be avoided. In the majority of cases there is no danger of such a result, but in a person of a highly nervous temperament it is different, and with them the very first step towards health would be to enable them to get rid of themselves."

Paget, † who has with Skae called attention to the hysterical production of real disease, thus speaks of the "nervous-mimicries":

"Some mimicries are essentially mental; such, for instance, as those in which patients, out of mere fear and keen attention, acquire the pains of cancer, and localize them in healthy parts; and as nearly all mimicries or mental influence may be discerned, just as it may in nearly all real diseases in which consciousness remains. An influence impossible to separate or

* Borderlands of Insanity, p. 22.

† *London Lancet*, vol. 2, 1872, p. 513.

weigh, generally increasing with the duration of the disease, yet not essential to it, whether it be real or mimic. But in all mimicries it is hard to discern any mental influence at all. Some are imitations of disease very far from mental associations—the cases, for example, of intestinal distention, constipation of many days' duration, constant vomiting and apepsia, rapid heart's action with slow breathing, largely-pulsating arteries and phantom tumors. Some are found in commonplace, ignorant and slow-minded people who never saw or heard of the diseases imitated in them. Some occur in children who could neither imagine nor act what they tell and show, though as they grow up they may become those in whose successive mimicries the mental influence takes a constantly increasing part. And, to end, whatever may be ascribed to mental influence, it can produce mimicry of organic disease in only certain persons whose nervous organs seem wholly prone to this manner of disorder, and whose spinal and ganglionic systems must be deemed erroneous, as well as, or more than, their brains. For nervous mimicry is not very frequent among the evidently insane, and among the sane there are many who cannot bring about a mimicry of disease by any effort of imagination or direction of the mind. Among these I am happy to count myself. I have tried many times carefully, and with good opportunities, but have always failed."

There are some physical symptoms that may appear dubious, an occasional blunting of electric reaction, and the continuance of the tendinous reflex. The skin of the anesthetic patient is sometimes anesthetic and the sensory tests are blunted accordingly. In cases where the tendinous reflex is exaggerated it will be found that there has been well matured hysterical paralysis for some time, and that the clonus of the heel is much greater than in any form of myelitic paralysis, and there is no atrophy. When an anesthetic is administered there is a disappearance of the contracture in cases of hysterical paralysis.

Hysterical Traumatic Contractures.—Charcot has devoted much attention to the consideration of imitative hysteria, of the kind alluded to, and in a late paper has called attention to the contractures of traumatic origin that may often be witnessed. It is possible that we may be required to make a distinction in accident cases between cicatricial contraction as a result of nerve wounding, and that of a more substantial sort where perhaps a superficial wound has been made, and where hysteria causation may give rise to a deformity, which may,

however, be recognized if proper tests are made. Charcot refers to several young people who received slight wounds, in themselves not being sufficient to cause contracture from tissue changes, but where there was undoubted deformity, and the occurrence of general hysterical symptoms, such as convulsive crises. One of his cases is that of a girl of sixteen, of frail appearance, who is "placidly hysterical." She is an orphan, and after her mother's death, which was from consumption, she entered a religious institution, and afterwards came under the care of Charcot. There was a history of hereditary insanity in her case, her father having died of general paresis, and she had an idiot brother. She had never had hysterical convulsions, but mentally shows a certain weakness and wantonness. Her left hand is the seat of a deformity which has lasted for a year, but has lately become less pronounced. "The wrist is free ; it is the same with the other articulations of the superior extremity. The first phalanges are bent upon the metacarpus. The other phalanges present but a slight degree of flexion. The fingers thus uniformly bent, are crowded together, forming a sort of cone, of which the summit corresponds with the extremity of the last phalanx. The thumb, in adduction, is strongly forced against the index finger. It is easy to convince ourselves that muscular rigidity is the sole cause of this deformation, and that the articulations and the ligaments are not affected. Attempts at reduction show this sufficiently. Chloroformization would give us peremptory proof of it, but we have feared any perturbation, which would prevent us from studying this deformation *de visu*. On the other hand, we find here the characteristics of the spasmodic contractura. If indeed the flexors are the most affected, and determine the import of the deviation, the extensors are also involved ; for it is as difficult to exaggerate the flexion as to produce the extension. This simultaneous action of the antagonistic forces is one of the characteristics of spasmodic contractura. * * * The deformed hand is colder than the other, and shows a somewhat marked bluish tint, denoting a manifest trouble of the vaso motors. There is atrophy, or rather a slight emaciation, not only of the hand, but also of the other segments of the limb. The forearm and the upper arm are a centimeter less in circumference than in the opposite member ; it is not a question of veritable muscular atrophy, but of emaciation due to prolonged repose. We find besides a diminution of general and special sensibility upon the entire half of the body in which the deformation exists." In this case, as well as others,

we are likely to detect limitation of the visual field, and hemianesthesia, and the contracture itself is peculiar ; and in other hysterical patients, where there is no suspicion of injury, it is possible to produce it by excitations of various kinds. There is often some ovarian trouble, and one of the peculiarities of the deformity which Charcot strongly insists upon, is the permanence and persistence of the contracture, which is different from that of hemiplegia or that due to any other organic change, for in hemiplegia, as well as in sclerosis, there is some relaxation during sleep. In this case the wound was of the most insignificant kind, the patient receiving more than a year before a slight scratch upon the back of the hand over the second metacarpal bone, which healed in four or five days. The development of the contracture was sudden and unattended by pain, and persisted a long time after the healing of the wound. The contracture differed from that which we might expect from organic brain disease from the fact of its sudden appearance, and although Charcot points out the fact that in descending cerebral or spinal sclerosis we may find the same condition produced as the result of a traumatism, " there is not the same disproportion between the lightness of the traumatic injury and the intensity of the contracture, which has no longer the same persistency after the cure of the peripheral irritation."

Charcot suggests certain tests for the detection of simulated contracture and that which undoubtedly originates in hysteria.

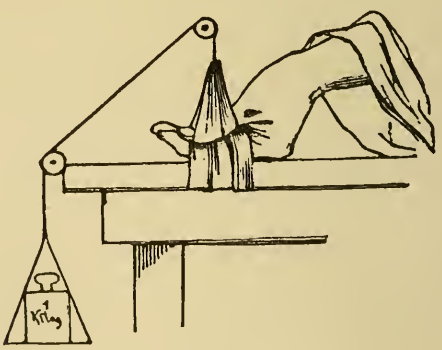

Fig. 4.

For this purpose he applies the myographium, and after attaching a weight to the end of the fingers of the contracted hand, it is found that in the diseased state the contracture is not over-

come until the end of twenty or twenty-five minutes, the descent of the fingers being accompanied by slight tremor of a regular character, while the simulator is unable to keep his hand in the same position for anything like the time above mentioned.

The most satisfactory test however, is that which depends upon the respiratory effort upon the part of the simulator in his attempt to preserve the position of the hand. Fig. 5 shows tracings made by means of the myographium, A. B. being those of a patient; and C. D. those of the simulator.

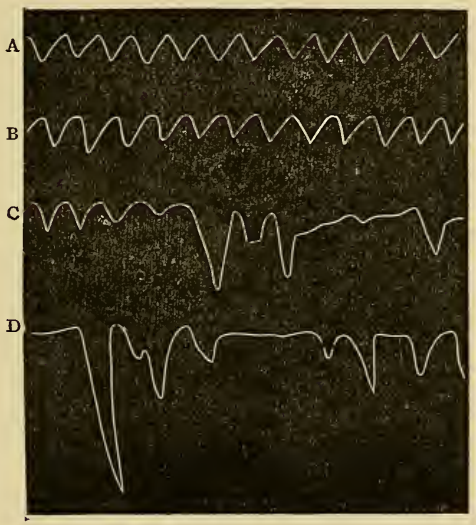

Fig. 5.

In courts of law the existence of this hysteroid state may prove to be an important factor; and it will not do to take an unscientific view of the patient's state, although it may be urged that the hysterical condition, especially if it reaches the dignity of a diseased condition in which hemi-anesthesia with visual defects and convulsive seizures are expressed, may influence our judgment in arriving at a conclusion as to the susceptibility of the patient to slight injuries; the responsibility of the defendant in such cases might be limited by the dyscrasia of the plaintiff, and we cannot consider the case of a person presenting contracture of this kind as the result of an in-

jury due to the carelessness of the defendant as we would where a perfectly strong, vigorous person presented a tissue change with contracture, as the result of mechanical nerve lesion. It may be wise to regard with suspicion cases of slight contracture without nerve wounding, or descending neuritis among men, for so far the reported cases of pronounced traumatic hysterical contracture have occurred among nervous women.

Epidemic Hysteria.—Considerable medico-legal interest arises in cases of epidemic hysteria, and we find that some persons who may be thrown together may present a peculiar form of hysterical trouble. In this condition a variety of purposeless violent acts and breaches of the peace may be committed by individuals under the influence of religious excitement. Hecker refers to a peculiar hysterical condition which existed in the fifteenth century among the German nuns who fell to biting each other, and the epidemic spread so that eventually every religious order in Europe followed the example of the nuns of Saxony and Brandenburg. The sexual excitement which grew out of the gatherings resulted in all manner of outrages upon public decency. Many of the subjects exposed themselves in a most indecent manner, tore their hair and went howling about the country. It is probable that as a result of the freedom from restraint and religious excitement inseparable from camp-meeting and revivals a morbid sexual state exists which leads to the commission of acts that might often form the basis of medico-legal inquiry.

I have known of one isolated and clear example of epidemic hysterical insanity in which two members of an unfortunate family became the subjects of a condition bordering upon hysterical mania. An hysterical girl was taken to the mountain for her health, but no benefit was derived from the change and she grew more violent and unreasonable. Her mother, and a sister very nearly her own age, were her companions and constant nurses. Upon their return journey to New York the sister showed an unnatural excitement which developed before they reached Troy into a veritable hysterical mania. They became so raving and violent that the hotel proprietor in that city turned them out of his house and put them on the cars, but in Albany they again rested, and their sad condition being mistaken for drunkenness, they were arrested, but were finally released and again began their journey to New York, the mother being now in a partially responsible state as she was half

crazed by the excitement and disgrace. They finally reached New York and went to a hotel where they staid for a night only as one of the sisters tried to force her way through the fanlight over the door of her room and so alarmed the guests that the police were called in and they were arrested and taken to Headquarters. They were removed by some friends and I subsequently examined them. The mental disorder in this case was sexual and it became so much worse that the patients were finally sent to an asylum.

In such cases as this the question of responsibility is an interesting one, and it was evident that the final action of the Albany judge who first thought the patients intoxicated, and afterwards sent them out of town, went to show that the behavior of the girls was not looked upon as criminal.

Hysteria with Destructive Tendencies.—A form of hysteria bordering upon insanity which is happily rare is that in which the individual wantonly destroys the clothing of other people. This he does by means of sharp instruments, vitriol and other corrosive substances. I know of one case of this kind, the individual presenting undefined symptoms of intellectual disturbance. He has several times been arrested however for secretly pouring sulphuric acid upon the dresses of ladies in crowded thoroughfares. Ogston refers to the "Piquers," a class of men who wantonly cut the clothes of women in the streets of Paris. He however believes as I do, that in a number of cases a motive can be assigned for these acts, and alludes to two cases—one that of a young woman who manifested a tendency to break windows, and another that of a man who amused himself by slyly snipping ladies' dresses with a small pair of scissors. In the latter case beyond a taciturn misanthropic disposition and a slight degree of imbecility no mental alteration was discernible.

The Desire for Notoriety.—There are various other species of deviltry that are sometimes the expression of a peculiar mental state which may be called hysterical. The case of "Gentleman Jo," a miserable weak creature who created a sensation throughout the country by anonymous letter writing, is well known. One very well-known clergyman of New York was kept in a constant state of annoyance by the receipt of several hundred letters and scurrilous postal cards within a few weeks which led to the most humiliating *contretemps*. It was supposed at first that the motive of the writer was blackmail, but though

one postal card intimated something of the kind, such a conclusion under the circumstance was absurd and out of the question. The man was detected and taken to the Tombs, where I examined him. I found him to be of the insane temperament and of decided weak, hysterical mind. He was consumed with a vanity and desire for notoriety which I have only seen equaled in the case of Guiteau the assassin. He presented well marked hypochondriasm with sexual perversion, and there was no motive for the letter writing. Coupled with various indications of moral depravity, he was a petty thief. He was found guilty and sent to state prison where he subsequently died.

Winslow refers to the case of a man arrested and convicted of murder, who was unquestionably of the class to which these two men belonged, and the same degree of nauseating desire for notoriety was exhibited :

"While in the cell at the Town Hall, he was gratified when by his mimicry or other means, he could attract the attention of persons in the office above. When being taken out on Monday, he anxiously inquired whether there were a good many people standing outside, intimating that he should shout out to them if there were ; and on finding nobody standing about, he exhibited much disappointment. While in the cab, and also after being placed in the railway carriage, he persisted in sitting close to the window, and seemed pleased at the slightest notice. His utter insensibility of the awfulness of the crime which he has committed, is, however, most strikingly illustrated by a piece of shocking levity in which he also indulged in on Sunday. The attention of several of the police officers, who were in the receiving office, was attracted by bursts of merriment from the prisoners, and on looking in the cell-yard, the officers saw H. standing in a stiff upright position, slowly turning his head backwards and forwards. In reply to an inquiry what it all meant, the prisoner said : 'I am only showing them how I shall look in wax work next fair.' This performance he went through a number of times during the day, complying unhesitatingly with every request to show them again."

The moral perversion which is attended by the commission of impulsive acts by emotional persons of feeble will is suggestive of an advanced degree of hysteria, which occupies an undefined "borderland" between ordinary hysteria and actual insanity of a definable type. Such cases are those which try the alienist who attempts to say how far the mental condition interferes with responsibility.

Abominable Crimes.—Certain conspicuous degenerate moral states in connection with hysteria as well as insanity are manifested in sexual disturbances which lead the unhappy patient to commit crimes of the most beastly and brutal description. I cannot but believe that a congenital state of mental weakness is at the bottom of much of the unnatural impulses. It is difficult to conceive that the vile assaults upon children, and the peculiar inversion of the sexual feeling, arises from any thing else than a congenital defect ("imbecility"—perhaps, for want of a better name) which has hysteroid manifestations, and a survey of the police court registers of a large city, will disclose cases of the most interesting kind. In New York are a large number of unfortunate men who prowl about the public squares at night soliciting members of their own sex. These men delight to dress in women's clothes and masquerade in the streets. The case of Lord Clinton in London was supposed to be almost unique, and the subject was considered too filthy for discussion in the English papers. In this city during the past few years I am informed by one of the most intelligent police judges that a great many arrests have been made for violations of public decency, and no less than six of these were within the past year of men dressed in women's clothes who were engaged in soliciting for a purpose too vile to mention. This sexual inversion has been described by several German writers. The prisoners are usually young men of mincing gait and manner, with soft high voices, wide lips and large thyroid cartilages.

Pretended Suicide with Hysteria—Pretended attempts at suicide are quite common among hysterical females. Every general practitioner has met with such cases, and sometimes it may be a woman who keeps her household in a state of terror by threats she never intends to consummate. Such cases as the following reported by Ogston, are not of infrequent occurrence.

This author speaks of "a young married female, in the seventh month of pregnancy, who was discovered to be secretly addicted to dram-drinking. Annoyed at being detected, she pretended to be very ill, and to have swallowed arsenic to destroy herself. It was found that she had bought three drachms of this poison, and a small quantity was found in the bottom of a teacup in which she said she had mixed it. The remainder of the powder had been put away. The mildness of the symptoms, however, and the composure with which she complained of her tortures, led her friends to suspect that she was feign-

ing. When examined by Christison, he could discover no proof of poisoning, and her statements and answers to questions were such as to negative the fact of arsenic having been taken. She gradually recovered from some febrile symptoms which were present, and in two days admitted that she was quite well, but continued to insist that she had taken the poison."

"In July, 1838, H. J., æt. 25, went into a drug shop in Union Street (Aberdeen), to purchase an ounce of laudanum. Suspecting a suicidal purpose, the shopkeeper, instead of laudanum, gave the woman an ounce of tincture of rhubarb, which, without the cheat being detected, was swallowed on the spot. She then went to a second drug shop in the same street, with the intention of procuring a second dose of what she had asked for previously. She was, however, followed by the first druggist and handed over to the police. When seen soon after at the police office, the woman appeared to be excited, but manifested at times a strong desire for sleep, though the pupils were not contracted and the pulse was strong. Two hours afterwards, in spite of attempts to keep the patient awake, she had fallen into a deep sleep. Conceiving on this that it was possible that the woman had had the opportunity of taking laudanum before swallowing the rhubarb, though the pupils remained natural, the contents of the stomach were drawn off by the pump, but exhaled only a slightly spirituous odor."

One lady I knew went to a strange hotel in an obscure, back street, wrote several letters, *telegraphed to her husband*, and upon his arrival pretended to have poisoned herself, alleging as her motive his cruel treatment and his attentions to other women, of both of which he was innocent. She finally *recovered* after imparting to me the fact that she had taken nothing.

Self-Mutilation by Hysterical Patients.—Self-mutilation is an occasional feature of hysteria, and possibly may involve legal complications. Especially is such the case in suits for damages subsequent to recovery. Helen Miller, whose case is reported by Dr. Channing,* came under my observation some years ago. She had committed thefts from doctors' offices, and was arrested and sent to prison. While there she began to feign insanity, and was sent to the Asylum for Insane Criminals. She had been of hysterical habits, had eaten opium, and was treated by one of the physicians she had

* *Am. Journal of Insanity*, January, 1878, p. 368.

robbed, for dysmenorrhœa. Her first exploit in the asylum was to prick her gums, and the blood therefrom was mixed with urine and crumbled bread—so that an attack of hematemesis was suggested. She had several attacks of hysterical dysmenorrhœa, was irritable, depressed, and had fits of temper. Then she began a system of self-mutilation which was something extraordinary. At various times she thrust pieces of glass, splinters and other things into various parts of her body; cut herself with pieces of tin and a broken bottle. Upon one occasion she broke her chamber over her head. Dr. Channing removed no less than ninety-four pieces of glass, thirty-four splinters of wood, two tacks, four shoe nails, one pin and one needle, at various times. In this case the woman's pride seemed to be that she was the object of surgical interest and of sympathy. I saw her after her transfer to the Blackwell's Island Asylum, where she was sent after her second arrest for theft, as she had been discharged from the Auburn Asylum when her first sentence had expired. She was hysterical, but I found no real intellectual derangement, and I should not consider her legally insane.

A case is reported by Mr. Ferguson,* the patient being a woman in St. Bartholomew's Hospital.

M. W., a fresh colored, artless looking girl, spare but not badly nourished, was admitted into the hospital with the following history: About four years ago she was subject to fainting fits, but has never appeared very excitable. According to her own account she had a fall last July whilst in service, by which her left knee was injured, and was for some time exceedingly painful. In this condition she was sent home, and the knee was then poulticed. After a day or two a needle was seen protruding over the patella; this her mother removed. As the knee was now better she returned to her situation; but in about a fortnight, the same again commencing to distress her, she was again sent home, and before long five needles were removed from the same situation. After a short time the arms and legs became similarly affected. Things proceeding after this fashion, 101 needles and pins, many of large size, curiously twisted and deeply imbedded, were removed by her usual medical attendant, Mr. Wicksteed, of Walthamstow. Although some years ago she had a habit of swallowing strange things—pieces of paper and the like—she is sure she never swallowed any pins or needles, and can-

* *London Lancet*, July 20, 1872, p. 78.

not, she says, give any explanation of their appearance. During her stay in the hospital in February last, ten needles and pins were removed by Mr. Baker and Mr. Ferguson.

The facts that the right hand and arm presented two marks only where needles had been withdrawn, whereas the left hand and arm showed thirty-seven marks, that the girl was right-handed, that all the pins were destitute of heads, together with other circumstances, led to the conclusion.

Pretended Assaults.—The most striking changes of character are evinced by young girls whose disordered emotions lead them to behave in a manner to impress all who see them that they are possessed with a devil. Says Wilks,* "When you see a paragraph headed, 'extraordinary occurrence,' and you read how every night loud rapping is heard in some part of the house, or how the rooms are being constantly set on fire, or how all the sheets in the house are devoured by rats, you may be quite sure that there is a young girl on the premises."

During the excitement, which is often epidemic, we are occasionally startled by the recital of sensational stories with which the press teems. Only within the past month two cases of probable hysterical troubles of this kind have obtained wide publicity. One of these is that of a young girl in Richmond, who claimed she was assaulted by burglars, but her story was palpably false, and her state of mind grew out of the general feeling of alarm that attends the commission of several real burglarious attempts in the neighborhood.

A nurse girl some months ago declared that the child committed to her care had been stolen from her by men in the street, and great consternation was caused by her story, that she related on her return. The friends of the girl, however, a few hours afterwards, restored the child to its parents, and it transpired that the woman had purposely left it with them.

Cases are detailed where women have set fire to buildings, or the clothing of children, and were unable to give any motive for the crime. There is another class of cases the subjects of which claim they have been outraged or maltreated, and give the impression that self-inflicted wounds were made by their assailants, and as a result innocent persons are occasionally arrested. In such cases local examination will rarely reveal any indication of violence, but in cases of women of questionable purity it is a difficult matter to swear positively from any examination that their stories are not true.

* Lectures upon Diseases of the Nervous System, p. 367.

Medical men are occasionally troubled by women who claim that they have been maltreated or outraged. Such persons are apt to trump up cases in Court and are ready litigants. The charges against respectable persons rarely stand the test of careful examination, and it will always be found that the stories told are overdrawn and bear the manifest evidences of fraud and exaggeration. A prominent practitioner of New York was sued some years ago by an adventuress who claimed that she had been poisoned by nux vomica. The evidence showed that her pretended poisoning was of hysterical origin, and that she had repeatedly made requests for money, threatening various things should the doctor fail to accede to her demands.

A case where a young woman had claimed that she had been outraged is detailed by Ross :*

"In December, 1876, a girl of eighteen was found one evening standing with her clothing wet and muddy, in an apparently stupefied condition, in the closed doorway of a restaurant in the center of Manchester, a few yards from where she was lodging. She was taken home and to bed, and a medical man was sent for. He found her to all appearance unconscious of what was going on around her, and uttering some disjointed and incoherent complaints of having been drugged and threatened. He thought she was recovering from the effects of some narcotic and did not at first pay much attention to her story. The following day, however, she appeared worse, and in the evening her condition was considered so critical that the police were communicated with, with a view to her statements being taken down. She was visited by two experienced detectives, who, seeing how matters stood, and having the doctor's assurance that she was in a dying state, sent at once for a magistrate, before whom she made a solemn declaration to the following effect: She believed herself to be dying. On the previous evening a solicitor, at whose office she had called on business, told her she must go into a convent, and gave her 'some sort of a dark, sweet drink' which rendered her senseless. On going down-stairs from the office she met a Jesuit father, whom she had seen once before. This gentleman took hold of her and pulled her along the street to a little house in a court, where there was an upper room with a bed in it and a cross on the wall. Having got her in the room, he said improper things to her, and gave her a little cake which affected her directly. The woman of the house came into the room and found her on the

* Vol. ii, p. 887.

floor, after which she somehow got outside, the priest following. He again dragged her along in the dirt to the street corner where he ran away.

"The solicitor and the priest, both of them well known and highly respected, were thereupon placed under arrest in the middle of the night on a charge of having administered certain poisonous drugs with intent to murder. The story was proved to be purely imaginary, and the magistrates dismissed the case."

Du Saulle relates the case of a young girl, who under the influence of hysteria made the most calumnious accusations against the priests and against the members of a religious order, whom she claimed to have outraged her. The father of the girl killed himself in despair, and it afterwards transpired that she was declared a virgin by the Faculty of Medicine of Montpelier.

Chloroform and Hysteria.—Our services are sometimes required in cases where it is claimed that chloroform has been used in the perpetration of crime, either for the purpose of facilitating robbery, or more rarely in cases where hysterical women have made the claim that they have been outraged under its influence. This is the case where nymphomania or erotomania has existed, but very often the claims of such people will not bear investigation. McIntosh in an article upon morbid impulse refers to a woman who was the subject of excessive nervous exhaustion, who "is never done talking of honorable marriage and the husband she ought to have had, if she had been permitted to remain outside the asylum, away from the parties that administered chloroform and ether to her. In her case there is hyperesthesia of the emotions, and her impassioned entreaties, tears and seizing of the hand betray the ardor of her attachment." The element of mystery and the popular superstition regarding the use of anesthetics often lead to their being referred to by women who claim that they are the subjects of indecent assault. The papers were filled some years ago with the remarkable declarations of a young woman, who lived in an interior town in New York, and who claimed that while alone in the house she was surprised by the entrance of masked robbers, who bound and gagged her, and applied chloroform upon a cloth to her face, and after assaulting her brutally she became unconscious. The story was so palpably fraudulent that it should have received little or no recognition by those about her; but as in other cases of the kind we find sympathetic friends, and a sensational press ever ready to believe in and

give publicity to the hysterical plaint of the impostor. In this case the ropes that bound her were evidently applied by herself, and the quantity of chloroform alleged to have been used, a small bottle having been found, (which it transpired she had bought herself), made her story appear at once manifestly absurd.

Pretended Assaults by Dentists.—We from time to time hear of cases in which women claim that while in the dentist's chair and under the influence of chloroform they have been indecently assaulted by the operator. Unfortunately for the dentist he has no witnesses to prove his innocence, and the unsupported statement of the patient who is hysterical and labors under an hallucination is often received by sympathetic jurors as true ; for it cannot be conceived by them how any woman could so forget herself as to make a charge of this kind, unless there was some actual ground. Wharton and Stillè* report the case of an eminent and highly respectable dentist who was charged with rape upon a young lady of unimpeachable character, who was engaged to be married. She testified that the doctor, who had been her dentist for a number of years had previously always behaved toward her like a gentleman. On this occasion the tooth on which he was operating gave her much pain and the dentist offered to put something in it to destroy the nerve or give her ether as she wished. She told him she preferred the ether, which was administered. She became somewhat under the influence of it, but stated she did not lose consciousness, but was unable to move. The dentist then felt her pulse and passed his hand up her arm under her loose sleeve, and after this put his hand on her breast under her dress ; he then put it up under her dress, then went before her, raises her clothes, separated her feet, which were crossed, and drew her to the edge of the chair and had intercourse with her in that position ; during all this time her eyes were closed. All of the above she testified she could distinctly remember. The dentist then went to the washstand, poured water into the basin, returned and put her clothes down and lifted her back in the chair. After a few minutes he told her that he would have to take one of her teeth out, which he did after giving her ether at her request. After her return to consciousness she was introduced to another patient who had come in. Then after making an appointment for another day with the dentist to have the teeth finished, bade the dentist good-by and made no complaint until she had

* Wharton and Stillé Med. Jurisprudence, vol. ii, p. 245.

reached home. In the evening she began to menstruate, and before this she did not examine herself or her clothing, nor was this done by any one. Two or three days later her clothes were examined by her mother and then washed.

The dentist was found guilty and sentenced to four years and six months' imprisonment; he was however subsequently pardoned by the executive of the State, in consequence of the large mass of testimony, presented by physicians and dentists going to prove the entire possibility that the whole accusation grew out of an hallucination such as ether is able to produce.

A case closely resembling that of Dr. B., occurred at Montreal in 1858. A dentist was indicted for attempting to commit a rape upon one of his patients under the influence of chloroform. At the trial a witness testified that his wife was under the strongest impression that she had been violated by the prisoner while under the influence of chloroform: yet her husband was present during the whole time she was unconscious. The verdict of the jury was, "guilty of an attempt to commit a rape, with a recommendation to mercy." (*Boston Med. & Surgical Journ.*, November, 1858, p. 287, and Wharton & Stillé, vol. ii, p. 248.)

How much more just was the decision of the jury in the following case:—

"In the Midland* Circuit, Northampton, Eng., a surgeon's assistant, Mr. George Howard, aged 32, was indicted for having on September 11, feloniously and violently assaulted and outraged Fanny Harriot Childs. It seems that the prisoner had on the day before administered chloroform in his surgery but did not succeed in producing unconsciousness. She called the next day, and he then said he had some stronger chloroform, and again attempted to produce anesthesia. For a whole hour she remained conscious, at the end of that time Miss Fellows, the only other person in the room, went out. On her departure, the plaintiff testifies that the prisoner got down upon his knees and committed the offense with which he was charged. While this was going on she was perfectly conscious but powerless. Miss Fellows returned in about fifteen minutes, and found the plaintiff sitting in the chair in precisely the same position in which she was left. She was then speechless. Soon after this the plaintiff was escorted home by Miss Fellows and the prisoner, she walking between them. She was

British Med Journal, Nov. 17, 1877, page 709

unable to speak until she arrived at her home, and not till after the prisoner left. She whispered to her husband something about his being a scamp, and later she made the complaint about him to several.

"Dr. Benjamin Richardson, F. R. S., of London, who was called for the defense, said that chloroform, laughing gas, etc., had been his special study. There were four stages or degrees in which chloroform operated. The first stage being one in which consciousness was not actually lost; there was little resistance, and a desire for air. The second one was a stage in which consciousness was lost, but operation was impossible; the patient often screamed often without provocation. The third stage was that of complete unconsciousness. There was no rigidity; if the eye-ball were touched, the eye would not flinch, and in that stage the administrator would say to the surgeon: 'You may go on.' That was the last stage for operation in a large number of cases. Judging by the description given by the prosecutrix of her own condition on the day of the alleged assault, he believed she was in the second stage. In his own experience, he had known persons in the second stage subject to delusions as to what had taken place while under the influence of chloroform. Dr. Richardson gave a number of instances which had come under his observation; and stated that those delusions were the subject of some of the earliest objections to chloroform. He mentioned the case of a lady who, in the presence of himself, her father and her mother, and a dentist's assistant, while under the influence of chloroform, brought a charge against the dentist who was operating upon her precisely similar to the one in the present case, and continued firm in the belief that the charge was well founded, long after the influence of the chloroform had passed off, and probably still continued in the belief.

"Other medical witnesses gave similar testimony regarding the delusions of incomplete anesthetization. The jury gave a verdict of acquittal. The justice then remarked that this was no imputation on the veracity of the prosecutrix, who was undoubtedly under a delusion; and also that prisoner was entirely cleared of any imputation in respect to the charge. The prisoner was then discharged."

Every physician familiar with the use of anesthetics, especially chloroform, knows that at a stage of the anesthesia the patient is very apt to have erotic excitement, which may amount to actual hallucinations, and in these cases the patient may be perfectly honest in her belief that she has been outraged. Hap-

pily, since the introduction of nitrous oxide gas in dentistry, the effects upon the nervous system are more transient, and we do not hear of so many accusations brought by hysterical or designing females. The medical examination of such cases tends to relieve any objective signs of the alleged assault, whether it has occurred or not, and no reliance can be placed upon the majority of the ordinary tests laid down by the text-books.

We are to carefully investigate the patient's history in all such cases, her disposition, and anything that may lead us to suppose she is the subject of hysteria.

Can Persons be Robbed While Under the Influence of Chloroform?—In cases where it is alleged that chloroform has been used to facilitate robbery, we may safely doubt the statements of the victim. It has been held by numerous authors, that it is utterly impossible for a person while asleep to be anesthetized without some resistance. The late Dr. Stephen Rogers, some years ago, in an excellent article, expressed himself as follows :

1. "As to its use to promote the greater security from the disturbance of the sleeper, even were that practicable, the very time that would be consumed in the gradual and cautious administration of the vapor,—the only possible and theoretical manner of accomplishing it—would so increase the danger of detection, that few thieves would think of employing it.

2. "During the course of the administration of chloroform, whatever manner may be adopted, the patient or subject as a rule becomes excited, often very violent and turbulent, with an irrepressible propensity to sing and shout, which is often so loud as to alarm the inmates of the whole house. He is in a state of wild, chloroformic intoxication. The exceptions to this rule are so few, that no prudent thief would think of running the risk of meeting one of these exceptions.

3. "Supposing the two preceding obstacles overcome, and the victim thoroughly quieted into a narcotic sleep, a third and very frequent complication arises. He begins to vomit, and while he generally does not make much noise about it, still he may, and he always requires attention, lest fatal strangulation occur. It may be presuming too much to credit this class of criminals with any care, whether their supposed chloroformed victims die of strangulation or not, but I think that a common-sense view of the case must lead to the conclusion that even were chloroform an available agent in facilitating robbery, the

knowledge among the criminal classes that the abandonment of their victim with a towel still over his face, and the liabilities of vomiting and strangulation would often add the crime of murder to that of robbery, would have great effect in deterring them from the further employment of it."

Taylor, in his work upon poisons, refers to this subject, and disbelieves the stories of persons who claim to have been suddenly rendered insensible for the purposes of robbery or rape. The strongest argument against forcible and sudden anesthesia has been presented by Stevenson, of Guy's Hospital, who found that in more than two hundred cases where chloroform had been administered to adults they were not rendered insensible until eight or ten minutes, and has alluded to the fact well known to medical men who have occasion to use chloroform, that many individuals are able to stand immense quantities without any appreciable effect.

Dr. R. M. Denig, in a paper on chloroform and its medico-legal relations, read before the Columbus Pathological Society, reported in the Ohio *Medical Recorder*, January 1877, gives the results of a number (some 29) experiments on different persons to learn if chloroform could be administered to anesthesia, to persons asleep without waking them. A certain number of cases (about one-third) he succeeded in anesthetizing without waking them, but in order to accomplish this he found great caution and great skill were necessary, and concludes "that the expert ought in justice to declare that it is possible, if it is *not* easy, to render a person insensible by chloroform during a natural sleep, in order that he may be made the victim of a criminal assault."

Cases are adduced which show that the motives of the alleged victims are of the most questionable sort, and that not only is the claim of compulsory anesthesia made to cloak some crime, but it is advanced, as I have said, by young women of an hysterical turn of mind, or men of a similar temperament, as a means of creating sympathy.

If among this latter class there is a strong temptation to pose as heroes or heroines, or for the sake of newspaper notoriety.

A most remarkable case where the victims of a robbery honestly believed they had been chloroformed, is the following: In August, 1871, a house in Seventy-first street was entered by burglars, who broke a pane of glass of a rear basement window, pushed back the bolt and raised the sash. They took from the dining-room a quantity of silver-plate, and enter-

ing the sleeping-room of the proprietor, rifled his pockets of over one hundred dollars, and made off with his studs, sleeve buttons, as well as some expensive wearing apparel of the ladies of the family. They next entered the room occupied by two young ladies, and collected a quantity of jewelry and money, and left the house. It was claimed that all the members of the household had been drugged with chloroform, and they did not awaken until late the next morning, and then they suffered severely from the after effects of the drug. The story of the chloroform poisoning seems to have arisen in the mind of one of the young ladies, who was of a highly nervous temperament and suffered from extreme emotional excitement, incident to the adventures of the night. She alleged that chloroform had been used, and she based her opinion upon the presence of fine powder or dust, which was scattered upon the articles about the room. As chloroform leaves no such deposit, the conclusion is irresistible that the drug had not been used.

Many of the imaginative tendencies of young women of this class arise from the exceeding sensational newspaper paragraphs and flashy novels which they have read. An absurd instance occurred in California, where a man was actually tried for rape, and sentenced to imprisonment for several years, upon the story of a waiter girl who slept in the same hotel. It appeared from her statement, that the defendant learning that chloroform might be introduced into the room by means of a key-hole, procured a spray apparatus, with which he deluged the room with the vapor of this anesthetic, producing insensibility of his victim, and afterwards entering and committing the crime. It appeared in evidence that an empty bottle labeled chloroform was found in his room, and this left no doubt in the minds of the jury as to his guilt. Dr. Rogers, in referring to the case, says: "The totally absurd character of the allegation is apparent to every one instructed and experienced in the use and in the effects of chloroform. We will suppose, by the way of illustration, that the occupant of such a room as this girl is said to have slept in may be anesthetized unconsciously by the vapor of chloroform thus introduced through the key-hole, though I regard it impossible. But how is the operator, especially if he be an ignorant hotel waiter, without the slightest knowledge of chloroform, to know when unconsciousness is effected? How is he to tell when the victim is ready for the breaking open of the door? Would the most skilled administrator of chloroform venture to fix the moment that the occupant of any given room would be anesthetized by chloroform thus introduced into it?

Would he dare to indicate the time which divides the period of unconsciousness to all outer impressions and violence, or perfect anesthesia, from that of fatal poisoning from chloroform? Could he tell the moment that it should be discontinued in order to avoid this fatal consequence? I apprehend that such as could would be difficult to find.

"It is therefore obvious, that if this hotel servant committed the crime alleged under circumstances sworn to, it must have been brought about by most extraordinary combination of accidents, leaving out the question how he himself breathed, consummated his crime, in the same atmosphere, or rather chloroform vapor, which rendered his victim insensible and kept her insensible for an indefinite time."

Dr. W. H. Devitt* is, however, of the opinion that anesthesia may be produced by means of chloroform introduced into sleeping apartments, and he relates the extraordinary instance of a family of seven persons who were, in his opinion, at least, so much under the influence of chloroform, introduced into the room by means of balls of cotton saturated with it, that they slept while the house was being entered by burglars, who ransacked the house, and who even had the audacity to take a lunch from the pantry.

We are sometimes called to see patients in an apparently unconscious state, the assumption being that they are under the influence of chloroform. While we take into account that the anesthetic state lasts but a comparatively short time after the use of the agent has been discontinued, we are to appreciate the fact that a certain amount of muscular rigidity exists instead of the limpness and relaxation of chloroform narcosis, and it will be found upon touching the eye-ball that attempts are made to close the eye, and to resent this interference, if the patient be shamming, there will be an absence of the pulse changes, and the patient will often be detected in casting furtive glances about the room, when she thinks she is unobserved. In addition there will be found an ostentatious display of bottles, and if injuries are referred to, the marks will be of the most insignificant kind, and probably produced by the patient herself.

Hysteria in Men.—As hysteria occurs in males as well as females the question may arise sometimes whether the symptoms of so-called cases of insanity are not those of hysterical trouble

* *Am. Joural of Medical Science*, July, 1875, p 145.

after all. Wilks refers to the case of a man who had lost a great deal of money in speculation, and who for a short time became utterly unreasonable, but recognized his foolish indulgence in emotional excitement and his behavior, but could not control himself, and indulged in involuntary laughter and crying.

Charcot,* in an interesting clinical lecture, speaks of male hysteria which he is not disposed to think a very rare affection.

"It will not be out of place to say a few words concerning the hysterical neurosis so far as it is shown in the masculine sex. Hysteria is, incontestably, more frequently found in the male than is generally supposed. This subject of male hysteria is one of those to which, of late years, doctors have given much attention. No less than five inaugural dissertations relating to the matter were presented to the Paris Faculty from 1875 to 1880. Already Briquet in his excellent book had stated that for every 20 hysterical women—in Paris at least—there was one man attacked by the same affection. This figure appeared to me large. Nevertheless M. Klein was able to bring together from these authors 77 cases of hysteria in the male, to which he added 3 cases within his own knowledge; whence it was necessary to conclude that hysteria in the male is really not a rare affection.

"A fact brought to light in the same work, is that when developed in man, hysteria is generally hereditary. This is found to be the case in 27 out of 30 cases, and it is this matter of maternal heredity and of similar heredity (*hérédité similaire*) which leads to the saying that hysteria in the mother often engenders hysteria in the son."

When the disease is presented by men the subjects are usually well developed and apparently healthy persons. In such cases as this we are often called to decide the question whether the troubles of the patient are or are not of grave origin.

I was called some years ago to see a man whom I found to be in a state of opisthotonus and it was at first supposed he had taken strychnine. I found that there were none of the clonic convulsions of strychnia poisoning, and after waiting a few minutes all fears of such a condition of affairs were dispelled by his evident hysteria, and his speedy recovery when the use of the actual cautery was suggested.

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* *Le Progrés Medicate*, Jan. 20; Feb. 7, 1883; *N. Y. Med. Abst.*, March, 1883.

Hysteria in its Relations to Organic Disease.—Hysteria often exists as a symptom of organic disease of the nervous centers and we may do an alleged imposter injustice. As a rule such hysteria is associated with hemiplegia or equally well marked conditions.

Responsibility of the Hysterical Subject.—The determination of the responsibility of hysterical individuals is far from easy. Du Saulle says: "Can we apply to the passions the same rules as we can to madness? Evidently not. Violent passions influence the judgment, and even throw a false coloring over it in a grievous manner, but they cannot annihilate it; they occasionally carry away the mind to form extravagant resolutions, but on the brain no pathological trace can be detected. I will grant that in the instances we are discussing they might override the will, but moral responsibility is only lessened but not removed."

In his great treatise upon medical jurisprudence he arrives at the following conclusions, which, from a medico-legal point of view, are the following: "1. Hysteria as it is generally understood is not a disease in any way caused by continence; 2. in hysteria the affective faculties are disordered in different degrees, but the intelligence remains intact in the great majority of cases; 3. a feeble state of the will exists in hysteria and does not compromise the moral liberty so far as the loss of consciousness of the acts is concerned; 4. hysteria of a high degree brings with it a diminution of responsibility; 5. the mental derangement known as hysterical insanity is a true disease, and often dangerous; it is sometimes incurable, and necessarily brings with it immunity from punishment."

Punishability of the Insane.—The punishability of hysterical patients cannot be positively fixed. In the epidemical form of the disease wholesale punishment is the surest method of arrest, and in individual instances the same rule holds good. The hysterical girl who commits a wanton crime should be the subject of punishment just as the vicious imbecile. The knowledge of right and wrong exists—probably to a more marked degree in these cases than in any other, and the woman often calculates just how much mischief she may inflict upon others. As to loss of voluntary control, that is a different matter. When the hysteria is associated with marked intellectual and moral perversion, with delusions and hallucinations, we must approach the ground of responsibility with some caution. (See Appendix H.)

FEIGNED DISEASES.

The subject of feigned diseases is one of decided importance to medical officers, who are brought in contact with soldiers and sailors and prisoners ever ready to shirk their work, or to secure comfortable quarters in a hospital, or to furnish a pretext for discharge from duty; and we find as well, as I will show in considering cranial and spinal injuries, that diseases are often feigned for the purpose of securing compensation in court for trivial injuries. Ogston, whose classical work is one of the best of modern times, speaks of *feigned* and *factitious* diseases. According to his classification, we may consider, "(1), feigned diseases strictly so-called, or those which are altogether fictitious; and (2), factitious, or those which are wholly produced by the patient, or at least at his convenience. To these have been added by some writers, (3), exaggerated disease, or those which existing in some degree or form are pretended by the party to exist in a greater degree or different form; and, (4), aggravated diseases, or those which originating in the first instance without the person's concurrence are intentionally increased by artificial means." As Ogston suggests, this is a delicacy in distinction which is hardly warranted, for a purely factitious disease may be exaggerated or aggravated in a particular instance, while a person who simulates disease may at the same time present features of a factitious disease.

The ingenuity of malingerers is almost incredible. Not only may they resort, when occasion requires, to all manner of disgusting performances, such as swallowing excrement or blood or other offensive substances to carry out the particular rôle they wish to play, but they may also actually maim or injure certain organs for the purpose of gaining their object. The greatest difficulty in detecting impostures arises when we examine the subjective symptoms, and extreme caution is then needed, besides the adoption of the most delicate tests, which should be repeatedly made use of, until we are satisfied as to what is the real condition of the patient.

Feigned Pain.—There is probably no symptom so commonly complained of and none so easy to present, as that of pain. Being purely subjective the examining physician is frequently tried to his utmost, and much depends upon his knowledge of human nature and his perceptive faculties. The pain of the simulator is unsubstantial and inconsistent as a rule with that which would arise in any anatomo pathological situation. His attempts at localization therefore are very vague and un-

certain or he, on the other hand, is almost too accurate in the description of his sufferings. A neuralgia, for instance, is located in a situation where no nerve trunk lies; or a sciatica may be referred to the outside of the thigh, as it was by a woman I examined the other day; or to some other equally unlikely place. The neuralgia of the malingerer has no paroxysms or intermissions, and is not attended by any of the vascular cutaneous changes that so often exist in the genuine disease. There are no *points doloreux* or at least none that correspond with the anatomical situation at which we would expect to find them. The pretender says that his pain is aggravated by muscular movements, when, after all, such movements ordinarily have nothing to do with the increase of pain in the real affection. His expressions of suffering are much more demonstrative when he has an idea that he is under observation, and when his attention is diverted he apparently suffers but little or none, and often we are unable to find any facial or other bodily indications of distress. Pressure, even of the lightest kind, produces great torture for the simulator, just as it does in hysteria, although the hyperesthesia of the former is not real, nor is it associated in pure cases of malingering with other symptoms, at least with other symptoms that are classical and pathognomonic; yet when the same pressure is made and the patient's attention is diverted, he no longer complains of the pressure made upon the original point of contact, but fixing his attention upon a new point refers his suffering to the latter. Direct questioning or hints skillfully thrown out may cause the dishonest person to let his imagination run wild, and by encouraging the play of expectant attention, especially if the subject be a woman, the deception becomes clear.

A favorite seat of pretended suffering is the back; and, as I have already said, we often find that the dishonest individual sometimes refers his pains to the abdomen as well. If we have the simulator carefully watched, our suspicions will often be confirmed, and it will be found that when he thinks he is not under observation he will be able to do pretty much anything he chooses; but when he comes into court, or when he applies to a medical officer for privileges he desires, his complaints are redoubled and sometimes very ridiculous. In this connection I will mention the case of a woman who had been told that Pott's disease was accompanied by a tendency upon the part of the patient to support the chin for the relief of the pain. Although she had frequently been examined by medical men, nothing of this kind had been found to exist. When she appeared in court

during the trial of her suit for damages, she studiously supported her chin, but when she was in the corridors of the court house and at home she neglected to maintain the deception.

The simulation of hip-joint disease is quite common, but the pain is as a rule improperly referred, and that in the knee, which is one of the most important and constant accompaniments of real trouble, is not mentioned at all by the impostor. So, too, when rheumatism is feigned, or in fact where the pain of other inflammatory conditions is claimed to exist, none of the signs of swelling, heat, or redness, will be found, and movement of the limb is at all times unembarrassed. A person who will complain of a back pain that may be mistaken for that of spinal disease, and from the acuteness of which we may suspect meningitis; will manifest none of the rigidity and stiffness of movement which in ninety nine cases out of a hundred is a characteristic of inflammation of the spinal envelopes. There are none of the constitutional expressions or results of severe pain; such as sleeplessness and increase of temperature; and the functions of the bowels and kidneys are not affected. We neither find in the urine increase of phosphatic matter nor the urates. The patient will often complain that certain forms of movement cause intolerable suffering and misery, yet we may ascertain that he or she may make exertion of a much more severe kind, in which the same muscles and the same parts are exercised without any of the corresponding complaint. A young lady, desiring to escape her piano practice, complains of pain in one arm and shoulder, and gains the sympathy of her unthinking mother, while the same day she may devote one or two hours to lawn-tennis or use her hands in other ways and give no report of pain.

Foderé refers to numerous cases where malingerers have shirked their duty, alleging inability because of pain. He reports the case of an artillerist who was brought to the hospital at Martignes complaining of violent pain in the left leg, which it is supposed resulted from exposure and lying upon the damp ground. Treatment was indicated and followed up; blisters and other powerful agents were exhibited, and it was supposed that his leg had become thinner and shorter than the other. Finally he was discharged and left the hospital upon a crutch. When he reached Marseilles he learned of his discharge, and, unable to restrain his emotions and his great joy, he threw away his crutches and walked briskly without any limp or sign of trouble. He had, however, miscalculated,

for he encountered the commandant of the fort, and was arrested and imprisoned, and subsequently acknowledged his deception.

The malingering patient will sometimes give a clue to his deceit and the unsubstantiality of his symptoms by his disinclination to have anything done for him, probably believing, as it were, that the disappearance of his symptoms would be the loss of his stock in trade. Occasionally the reverse is true, especially where a claim is made for damages, and in such cases the impostors seek every occasion to express their desire for relief. It is common for such a person to say: "I would give ten thousand dollars if this pain were absent;" and this is sometimes very ludicrous when it comes from the lips of a slatternly boarding house keeper or a poor clerk who receives a few dollars a week as salary.

Beck refers to the case of a girl fifteen years of age who complained of a pain just back of the symphysis of the lower jaw. The result was that she was taken from school and she carried her point. When affected subsequently a strong mental impression was made by Dr. Thompson who attended her, and it was based upon the great antipathy she had to a dog. She was informed that the only remedy remaining was to rub the affected part over the back of that animal. The result was complete and immediate cure, without recourse to the prescription. But such cases as this are the ones most easily detected.

Mr. Hutchinson Upon Malingerers.—Mr. Hutchinson thus speaks of malingering, after laying down certain rules for the detection of impostures, and advising those who meet such cases that it is better for the time to assume that the patient's sickness is true than to make the mistake of overlooking a genuine disease. "The importance of this rule," says he, "can scarcely be exaggerated in its application to the casualty room of large hospitals. It is far better to allow nineteen knaves a temporary success in their schemes than to refuse relief to one really urgent sufferer. Cases come very frequently under my notice in which great hardship would have been inflicted had the suspicion of malingering been hastily acted upon. This rule, however, must of course only be allowed to apply to mild measures of treatment. Malingerers of a certain class, especially hysterical women, will often submit with eagerness to most painful measures of treatment, or even to those which entail permanent deformity. In all such cases the surgeon's duty to

withstand the patient's importunacy is clear. A man is at present in one of the surgical wards who has had his fore-arm amputated for injury. He now complains of a painful stump, and avers that the pain is such as to prevent his rest night and day; he is most desirous that another amputation should be performed. He is, however, apt to be dismissed, in the belief that he has intentionally exaggerated his symptoms. The following reasons support this view: 1. He has not the slightest aspect of suffering want of rest. 2. He complains of pain in the muscles of the part removed, not in the skin, and whenever his stump is examined, he always puts the remaining pairs of muscles below the elbow into constant action, alternately relaxing and contracting them in a manner which can be no other than voluntary. 3. He has never on any occasion given a correct guess as to the distribution of any one of the sensory nerves of the fore-arm, but is obliged to refer the pain to the whole hand and wrist. It is improbable that the median, radial and ulnar should be neuralgic at the same time. His case, however, confirms the remark that most forms of malingering are based upon some real loss and often upon some real disease still in existence; they are intentional exaggerations, rather than fictions pure and simple." Hutchinson's views are undoubtedly correct, but so far as my own experience has gone the primary injuries or conditions are in inverse ratio to the complaints, and this makes the fraud, especially where there is a well formed motive or object to be gained, more easy of detection.

Real Disease Apparently Feigned.—An unfortunate mistake to make is that of considering the symptoms of real disease to be fictitious manifestations, and the books contain examples where the patient's subsequent history contradicted the doctor's original diagnosis.

Danger of making a hasty Diagnosis.—"Dr. James Johnson reports the case of a man who complained of inability to move his shoulder joint without much pain; and yet nothing could be seen externally for a month or six weeks, during which time he was excused from duty. At length the surgeon became suspicious, and finding that he still made the same complaint, reported him, and he was flogged as a skulker. Shortly, however, a deep seated abscess was discovered in the shoulder joint, from which large quantities of pus were evacuated and ankylosis of the joint followed." The case occurs to me of a person who was injured and examined by

another physician. His primary symptoms, it is true, were not those which would impress the careless observer. He complained of ill-defined pains, formication and loss of power in the lower limbs, and his gait was somewhat uncertain and "ketchy." The physician who examined him pronounced the case one of imposture, but the appearance within two or three years of very marked spastic paralysis, with aggravation of the reflexes confirmed my original opinion of lateral *sclerosis* of the spinal cord.

Feigned Spasmodic Affections.—It is rare for malingerers to simulate chorea or other spasmodic disorders, and if they do it will be found that the movements are chiefly of a voluntary character, and the pretended malady is unaccompanied by any evidences of valvular disease so common in true affection. The reader is referred to the chapter on epilepsy and insanity for a description of feigned disease of this kind.

Tetanus, hysteria and hydrophobia are imitated with more or less success by the impostor, but a slight knowledge of the symptoms of these diseases is all that is required to settle the question of trickery. In the genuine diseases we find a rise of temperature which cannot be discovered in the individual who simulates; and though the patient who feigns tetanus and hydrophobia may copy with some fidelity the opisthotonos which he has heard is a conspicuous feature of these nervous disorders, he nearly always neglects the throat symptoms, and the muscular contractions are not consistent in their association or extent with the rigidity which he attempts to exhibit.

Feigned Unconsciousness.—*Unconsciousness* is sometimes feigned and so closely as to deceive the most watchful observer although in many cases the activity of the pulse will betray the lively emotional condition of the patient. It is possible for a clever person to control the manifestation of the excitement which is usually created by the appearance of a new person, especially a physician.

Voluntary Arrest of the Heart's Action.—Beck speaks of a man who could produce an apparent stoppage of heart action when he feigned death.

The case of the negro Thomas White which is so admirably described by Dr. Michel* is one of great interest. This man was able to arrest his heart and pulse at the wrist by taking a very deep inspiration and suspending his breath. Dr.

* *Boston Medical and Surgical Journal*, Oct. 31, 1878.

Michel also presents the case of the Hon. Col. Townshend reported by Cheyne, and that of a Mr. Grew of Charleston.

"The case of the Hon. Colonel Townshend comes to us through one of his physicians, Doctor George Cheyne, author of a Treatise on Nervous Diseases, who was called with Dr. Baynard to see this gentleman at the Bell Inn, upon his arrival at Bath from Bristol. At one of their visits, while Mr. Skrine, the apothecary, was present, the colonel stated that he could *die* or *expire* when he pleased, and yet by an effort he could come to life again, and asked an explanation of the phenomenon; but as he was weak and sick, these gentlemen with reluctance assented to his making the trial. While he prepared himself for so strange an exhibition Dr. Cheyne held the pulse, Dr. Baynard examined the heart, and Mr. Skrine placed a mirror to the mouth; the pulse sank until it could not be felt, all motion of the heart ceased, and not the least soil of breath on the bright mirror was detected. Then each in turn examined the arm, heart and breath, but could not discern the least symptom of life. He remained in this condition for a *half hour*, when the functions of respiration and circulation were gradually reinstated.

"Some years ago I was invited by Professor Frost, then dean of the medical college at Charleston, to meet the faculty by appointment to examine a Mr. Grew, in whom there was an arrest of development of the sternum. Besides many interesting facts concerning the play of the heart, which were readily determined through the simple integumental covering which alone separated us from that organ, we had an opportunity of witnessing a like experiment upon the suspension of this heart's action and subsidence of the pulse. When he took a deep inspiration and then held his breath, the pulse grew weaker and weaker, and finally stopped entirely, while the ear over the præcordial region could not detect the slightest impulse or sound. The heart had ceased all action, and there was temporarily no pulse throughout the system."

It is important to recognize this trick, and I have several times seen it attempted by medical students and others.

The Whittaker Case.—It is sometimes the object of malingerers to affect unconsciousness for the purpose of carrying out some scheme to gain sympathy, and occasionally we find self-mutilation to be a part of the plan. An interesting case of this kind is that of the colored cadet Whittaker who was tried some time ago in this city. Whittaker was one of the few colored

cadets who went to West Point and one of the least intelligent. He had repeatedly failed in his studies and upon the eve of an examination which would undoubtedly result in his suspension, he made a desperate attempt to gain the sympathy of the country, as well as the opportunity to secure time for extra study. As the medical counsel for the government I had ample opportunity to examine not only the record of the Court but I made a personal visit to his room at West Point. The defendant was found early one morning in his dormitory, bound to his bed with strips of cotton cloth, in an apparently unconscious state. His eyes were closed and his pulse, which was examined, showed nothing unusual. There were slight cuts, one upon the left ear and the other across the great toe. He remained apparently oblivious of his surroundings and of the people about him for some time, and finally opened his eyes and in a dazed condition expressed great surprise. From his story it appeared that he had been surprised *several hours before* by a body of masked men who felled him to the floor, bound him, and cut his ears and toe, and then after threatening him left the room. The medical witnesses for the defense were of the opinion that the threats of the assailants, the fears of the victim and the excitement had resulted in the production of trance! Much carefully given evidence effectually disposed of this fanciful theory. It was proved that none of the wounds were of a serious character, in fact they were all painless and trivial, and unattended by hemorrhage; that on the toe hardly severed the skin. They were in a situation in which he could have made them himself, and the presence of a razor and a looking-glass on the floor near him strengthened this belief. No marks of violence resulting from a struggle were found, and the bandage was so loosely applied and so flimsy that he might have readily applied it himself, in fact a young officer went through the process of tying and untying himself as Whittaker had probably done. The room in which the alleged assault had taken place had numerous openings communicating with other apartments, in which many cadets were at the time, and any disturbance would have been heard at once. A prominent feature of the case was the production of a letter of warning sent to the prisoner which it was alleged was written by Whittaker, and this drew forth a fight between the experts in handwriting.

After the trial I learned from an expert to whom several of Whittaker's letters had been sent for comparison, that among the number was one which with the exception of the erasures and interlineations, exactly resembled the "letter of warning" pro-

duced in Court. This was written by a young woman to the prisoner, and it is presumed that the celebrated letter in evidence was the joint production of the two. The prisoner was found guilty, but his sentence was modified.

Tests for Feigned Unconsciousness.—For the detection of shammed unconsciousness we are to apply tests of a sensory character, and among these may be noted the faradic current with the wire brush, the use of pins or needles, and perhaps the actual cautery. The threat to use this last instrument may be sufficient to bring the impostor to his wits. In a case related by Smith, and quoted by Beck, Gavin and others, a man named Drahe who had feigned total insensibility for months and had refused to be made to see the error of his ways by the introduction of aloes beneath his tongue, the shower bath and electricity, promptly recovered when the hot iron was suggested, the first indication of his altered emotional state being the rise in his pulse.

Sometimes the patient feigns unconsciousness for the purpose of escaping punishment, and the case of Phineas Adams* a deserter who remained apparently unconscious for over two months, is one illustrating the difficulties that a determined man will place in the way of the medical observer.

With Adams every species of revulsion was used, snuff was blown into the nostrils, electric shocks used, pins were run under the finger nails. It was even threatened in his hearing that an operation was to be performed for the purpose of removing his scalp to see whether there was fracture of the skull or not. He permitted himself to be cut into and gave no sign of suffering except when the scalp was scraped, when he groaned. No results occurring from the treatment or examination, he was discharged and sent to his father's house. He was seen the day after helping his father to thatch a rick. In feigned unconsciousness the muscular condition must be observed, the state of the pupils is also to be noted and the general condition of the skin, pulse and temperature are to be investigated. The sphygmograph may prove to be a useful instrument in some cases.

Trance.—The medico-legal relations of trance have been dwelt upon by writers upon Medical Jurisprudence, but it is very rare that such an excuse can be given for the active commission of a crime. It might be possible to account for the ignorance of

* *Edinburgh Annual Register*, Vol. 4, No. 2 and Beck.

an individual by the fact of his being unconscious, or being thrown into a state of suspended consciousness through fright or a strong moral impression.

There is a case related which has some interest in the fact that the patient claimed to be mesmerized when he committed a theft. A young man had been arrested for stealing a sheet. When he was brought into Court he seemed pale and unable to stand without support, and his eyes were closed and he appeared to be in a sound sleep, and apparently did not understand the questions put to him by the magistrate. It was testified by the police officer who arrested him that he had fallen into this state after his arrest in the station-house, although before this he had given an account of himself. Medical aid was sent for but nothing could be done to arouse him from his sleep (?). The prisoner had been arrested while trying to pawn the sheet which had been stolen from his landlady who was a laundress. One of the police officers knowing that a brother of the prisoner was a lecturer upon mesmerism sent for him, but the brother was unable to arouse him, although he answered questions readily. The brother stated that the thief had been susceptible for a long time to mesmeric influence and could by looking steadily at one object for some time go into an unconscious condition; that upon one occasion he became violent during an attack and had to be restrained.

The prisoner subsequently recovered and was tried, meanwhile having gone without food for several days and had not asked for nourishment of any kind. The plea that the patient was incapable of knowing the difference between right and wrong at the time of the theft was advanced, but did not hold, for the man was sentenced to fine and imprisonment.

In this case the question of the criminal act arises, and its execution seems to have little to do with expectant attention. An act of violence, had it been committed, would have suggested criminal irresponsibility, but theft implies personal benefit. The long continuation of the patient's alleged mental state, and his interval of lucidity when he told his story at the station-house, threw suspicion upon his conduct. It is probable that the verdict was a righteous one.

Feigned Somnambulism.—Feigned somnambulism is more common than feigned trance and it may readily be seen how a criminal surprised in the performance of a crime at night may resort to this species of deception.

Gavin * thus refers to an interesting case of feigned somnambulism :

"A remarkable case of feigned somnambulism is related by Recherz and Krüza. A rope-maker twenty-three years of age, was often attacked with a profound sleep, in the middle of his occupation, whether seated, standing, or walking; he then knitted his brows, gradually closed his eyelids, and began to repeat everything he had done during the day, from his morning prayer up to the time of the occasion ; for example, he simulated the movements of a man who puts on his stockings and shoes, cleans his dress, etc. If the sleep overtook him whilst walking in the country, he pursued his journey with as much assurance as if he had been awake, avoiding persons and objects which could have hurt him, etc. The story is reported with these circumstances and even others, without any suspicion of the fraud. Now two circumstances alone among these would have caused suspicion, the first is, that the man repeated in his pretended accession, all that he had done during the day ; a circumstance contrary to that which is observed in true somnambulists, who only execute, in the accession, those things which they have premeditated, or, which have previously strongly occupied their thoughts. The second is that this young man played a double game ; he repeated that which he had done from the first part of the day up to the period of accession, then continued that which he was about to do when the accession overtook him. The trick was finally discovered. The man professed himself cured, when a physician, charged with his examination, proposed to bandage his eyes, to ascertain if he was still able in that state to execute actions which hitherto had excited so much surprise."

Where somnambulism has been simulated, according to Du Saulle, it is for the purpose, first, of accomplishing an act it would be difficult or impossible to execute at other times ; secondly, to escape a just punishment for a reprehensible or compromising act ; thirdly, to excite commiseration and to fraudulently obtain assistance ; the falsehood and trick are not always easily detected.

Feigned Locomotor Ataxia.—Locomotor ataxia has been simulated and Lataud reports the case of a soldier who attempted to avoid military duty by this method of deception. In such cases it will be found that the tendon-reflex is present, that no pupillary or optic nerve changes exist, and in all prob-

* Feigned Diseases, p. 112.

ability the patient will not bear such tests as being told to walk in the dark or to stand with his eyes closed.

Feigned Paralysis.—It is a common thing for persons who claim that they suffer from injuries to sham paralysis, and the form chosen is either paraplegia or local paralysis. In such cases it will be found that there is usually more or less rigidity, that there is no atrophy and that the electric currents will produce their customary reactions. Under the influence of an anesthetic the patient will move the limbs and this is an important test, that however can rarely be employed except in the public service. It sometimes happens however that an amount of cunning will be shown, especially in cases where there are some grounds for believing the person in earnest, which may throw the medical man off his guard. As an interne I once treated a patient who was brought to the hospital in a helpless condition. He had received a bullet wound in the back while engaged in a burglary, and upon his admission he could neither move his legs nor feel the point of a pin. The bullet had entered near the sixth dorsal vertebra upon one side but could not be found. While under observation there were no *vesical* and *rectal* symptoms and he had *no erections*. After a stay of several weeks there was no pathological atrophy and the electric reactions were good. Numerous consultations were held at his bedside which he listened to and he seemingly took a great interest in his case. He was finally carefully removed upon a stretcher to the gaol to be cared for by the physician of that building and when he left us could apparently not move his legs. The night after his removal, however, he broke out of his cell, scaled a wall, dropped to the ground and found his way to parts unknown. In this case there was every reasonable ground to believe the patient's case was a serious one—though the absence of local and general symptoms was suspicious.

Simulators are apt to keep their paralytic arms rigid or to resist attempts made to bend them. Hutchinson has shown that a healthy arm trembles when a heavy weight is attached to it, which is not the case in paralysis.

Feigned Hemiplegia.—Gavin thus speaks of feigned hemiplegia :

" In suspicious cases of hemiplegia, our inquiries must embrace the origin of the attack, its nature and course. Whether arising, 1, from apoplexy ; 2, or likely to precede it ; 3, whether characterized by previous symptoms, such as pain in the head, disorder of the intellectual powers, spasmodic twitch-

ings ; 4, whether gradually supervening in persons in advanced life ; 5, whether preceded by a train of anomalous and perplexing symptoms having a relation to chorea, or fits of an epileptic character ; or, 6, whether succeeding at some period after the receipt of an injury.

" In the attack itself, if with the loss of voluntary power over the upper and lower extremity, we do not recognize paralysis of the side of the face, a drawing of the mouth to the sound side, more or less upwards, a curve of the tongue when protruded, convexity being toward the affected side ; an increasing dilatation of the nostril of the sound side, which is not equaled by that of the paralyzed, when a long inspiration is made ; the peculiar pointing of the foot when it falls, as it were, by its own gravity ; adduction of the affected arm, and slight flexion of the forearm, wrist, and fingers ; we have every reason to believe the case pretended.

" In pretended hemiplegia, asserted to be the result of an injury to the head, the simulator is not likely to be aware that the paralysis should occur on the side opposite to that injured."

The London *Lancet* of February, 1872, page 219, contains an extraordinary and amusing case of malingering so successfully carried out as to secure admission of the impostor into many of the London and Provincial hospitals, and while thus an inmate he was the recipient of marked attention and sympathy from the hospital physicians and surgeons, and also what probably pleased him as much, considerable whiskey, brandy, best wine, and table delicacies. He is described as a well-educated, clever, intelligent man, with some knowledge of Latin and Greek, as well as of modern languages. He would represent himself as a chemist, medical man, engineer, in fact he was all things to all men. He is described as follows : " He is a stout, good looking, short-necked man, reminding one rather forcibly of the pictures of Henry VIII. His hair is dark brown, short, and curly ; and he has the scar of a carbuncle in the cervico-dorsal region of his back. Age, about forty-three." He would assume the role of a hemiplegic, or would intensely interest professors and students by giving them an exhibition of tetanus, with beautiful risus sardonicus. Professors would lecture and students would take notes on his condition. " More than once (it is said) he has been attended all night by a diligent student, who carefully recorded all the attacks of spasms, etc."

He usually succeeded in securing a good home in the hospital for from one to two weeks, and at the first intimation that

the imposition was detected he would abscond, and he sometimes even had the effrontery to threaten to complain to the hospital authorities that he was ill-treated. At one time he had a genuine carbuncle on the neck, and even then he did not forget to have the tetanic spasms and opisthotonos, and "ground his carbuncle against the pillow." At this time, it seems, he was seriously ill, and was prevailed upon to make his will, giving to the hospital and physicians considerable amounts, after providing for his family. This generosity and gratitude on his part of course had its effect upon those in attendance, and he was fed on delicacies and wine, *ad libitum*. The following record from the note-book of one hospital where he was an inmate, gives an example of his methods. "Previous to the appearance of the carbuncle he had enjoyed excellent health. This afternoon, whilst riding in an omnibus, he was seized with a violent spasm, having throughout the day felt considerable irritation in the seat of the incision, and just previous to the attack a tingling sensation down the spinal column." From that time for many days after he had attacks of tetanus, complete in every particular. The slightest changes were noted, and students sat up with him at night, recording the slightest changes. After about two weeks he left the hospital in indignation because the nurse said she thought he was shamming. He here called himself Edward Mason, M.D. His motive was a matter of mystery to the deceived. As a hemiplegic he was also a success when he chose to take on this malady, the halting gait, the tongue deviating to one side when protruded, and even the post-paralytic contractions were perfect, but a day or so after he had left the hospital he might be seen walking perfectly.

Beck relates the following case:

"A dextrous deception was recently practiced upon the Court of Sessions at Hackensack. A fellow who had been a long while in prison, awaiting trial on an indictment for perjury, a few days previous to the time appointed had a severe paralytic stroke, which rendered one side entirely powerless. In this helpless condition he was carried from the prison into Court on a bed. The spectacle of an infirm fellow being, trembling into the grave, on a trial for perjury, had a visible influence upon the sympathies of Court and jury. The evidence however was so unequivocal that the jury convicted him. During the progress of the trial he became so faint that a recess was granted, to enable him to be reconveyed to his apartment in the prison for revival; the prosecuting attorney kindly

lending assistance. The Court, in view of the prospect of his being speedily called to a higher tribunal, instead of sentencing him to the State prison simply imposed a fine of five dollars, which his brother, who manifested the most fraternal solicitude, paid, and conveyed him away in a bed, in a wagon. The next day the prosecuting attorney encountered the fellow at the foot of Cortlandt street in New York, who told him laughingly, that he had recovered; and then dropping his arm and contracting his leg, in true paralytic style, hopped off, leaving the learned counsel to his own reflections.*

Bartholow relates the case of a malingerer who feigned paralysis, and he detected the fraud by surprising the patient. "In passing by a man in the hospital who professed to have paralysis of the left arm, I suddenly seized the paralyzed limb without his being aware of my intention, and threw it up. Greatly surprised, and taken off his guard *he exerted all his force to prevent my raising the arm.* His imposition was at once detected."

Simulated Contractures.—Contractures are often feigned by malingerers, and a constant maintenance of the limb in one position may give rise to a wasting which is suggestive of pathological atrophy. There is a stiffness which, however, disappears at night, and is always increased when the impostor believes he is watched. Sometimes, however, it is impossible to divert the patient's attention, or to throw him off his guard. A case which eluded detection for a long time is that of "a convict who was confined on board the Retribution hulk at Woolwich during the period of his sentence, which was seven years. He kept his right knee bent so as not to touch the ground with his foot all that time, and he was on that account not sent to hard labor with the other convicts. He was commonly employed in executing light jobs, which he could do in a sitting posture. When he moved from place to place he hopped upon the left foot with the assistance of a stick. At the end of the seven years he was discharged, and upon going away he very coolly observed, 'I will try to put down my leg, it may be of use to me now.' He did so, and walked off with a firm step without his stick, which he had previously thrown away!"

We shall sometimes find simulated contractures of the fingers, neck, knees, etc., but, according to Le Grand du Saulle, we shall find no lesion to explain the contracture, and if we put

* Beck's Medical Jurisprudence, page 14, 1836 ed. from N. J. newspaper.

the patient, when his inferior extremity is alleged to be affected, upon a small elevated platform, we shall find that he begins to tremble, and that he cannot keep up the deception.

Two cases are related by Beck, one of which was "a man who was brought before a board of medical officers, for the purpose of being invalided if found diseased. It was winter, and the surgeon proposed that the hand, in its relaxed and useless state, might be placed over the edge of the table round which they were sitting, while the assistants should keep the arm and and shoulder firmly fixed. In this situation, a red hot poker was gradually brought under the hand. As it came nearer and nearer, the hand gradually rose to the full extent of the power of the extensor muscles."

Another, "a most obstinate case, however, according to Mr. Marshall, was that of a private, who for two years endured everything that medical skill and suspicion could suggest. His complaint was paralysis of the lower extremities. He was finally sent home from the Mediterranean to be invalided. While in the harbor an alarm of fire was given on board ship. All hurried to the boat alongside, and on reaching the quay, the passengers were mustered. It was found that the invalid had saved not only himself, but his trunk and clothes.

Feigned Diseases Of Womb.—In certain rare cases we find that diseases of the female organs are simulated for the purpose of blackmail or divorce, and it is not uncommon for women to introduce irritating substances into the vagina, thus giving rise to leucorrhœa; or they may complain of pain and difficulty of movement.

Feigned Hemorrhagic and Cutaneous Conditions.—Hemoptysis and hematemesis have frequently been pretended, and persons have swallowed the blood of animals, which they have subsequently ejected, or have pricked or wounded their gums or mouth, so that a proper supply of blood should be provided.

Cases of factitious dysentery are common, but as a rule the character of the stools and the absence of mucus will throw light upon the deception.

The ingenuity shown for the purpose of escaping work is great indeed. Not only do we find that by the application of irritating substances the skin is denuded and ulcers are produced, but we find that it is often rubbed so that an open sore is created. It is not uncommon to

find malingerers producing a pseudo small-pox by the application of Croton oil to the body, but it hardly need be said that the absence of umbilication and other signs of the true disease show its artificial production. Sponges saturated with dyes or with blood have been introduced into the different cavities of the body to give the idea of cancerous tumors or hemorrhoids, and the books contain numerous cases where the guts of animals have been introduced into the rectum for the purpose of producing factitious prolapsus.

Feigned Diseases of the Eye.—Ophthalmia is artificially produced by the application of irritant substances, or by the removal of lashes from the lids, or by the introduction of sand.

It may be well to attend to those who sham *blindness*. Belladonna may be placed in the eye to produce pupillary changes, but most frequently we have nothing to guide us but the patient's statement and behavior. The fraud will often be explained by the method in which the patient holds his head, or moves about, by closure of the eyes, or by his behavior when suddenly confronted with some one he is interested in.

In some instances it is well to use spectacles in one side of which a prism is fixed. If these are put on and he is told to look at an object, of course the image will be doubled by the prism. If he is thrown off his guard, as he may be in his willingness to admit that he needs help in the way of glasses, he may admit, as one impostor did, that he sees two images, which, of course, will prove that his vision is unaffected. If he *admits* seeing only one object the test will be conclusive that he is dishonest.

Boisseau has given the following test for the detection of amaurosis when the individual has both eyes open. If there be a double image produced, when pressure on the angle of the pretended amaurotic eye is made, we may rest assured that there is fraud.

Feigned Deafness.—Deafness is often complained of by impostors. Ogston mentions the case of a prisoner suspected of shamming sudden and complete deaf-mutism. A bunch of keys was dropped at his back from a high window, while he was walking in the prison yard without any notice being taken. When the same thing was being done in a case of congenital deaf-mutism, the prisoner started in alarm and looked about in all directions except that from which the sound came.

For the purpose of detecting feigned deafness and dumbness

we may resort either to chloroform or other agents, in order to disarm the patient and to pervert the volitional condition, or we may produce a sudden shock upon the vocal organs, as has been suggested by a writer in one of the English journals. In this case a strong electric shock was applied over the larynx of a boy, who had for some time deceived a large number of people. I have upon several occasions resorted to this means in hysterical girls, and in one case, that of a young woman who had remained silent for over a month for the purpose of escaping her duties at school and securing a trip to Europe, I found that the application of the Faradic current, when unexpected, produced an instant return of speech and a vigorous remonstrance from the pretender.

Much depends upon the way we approach malingerers who feign deafness or dumbness. We are to watch their facial expression, and engage their attention in any way which seems the most appropriate. The threat of an operation, or some proposition which materially affects the interests of the person may cause him to betray himself. In a recent English case a prisoner accused of murder pretended to be deprived of his hearing and speech, and his pretended infirmity at first gained for him the sympathy of every one in the court-room. The man, however, refused to plead, but it subsequently transpired that he was perfectly cognizant of his situation and the course of the case, and he was finally convicted. Foderé relates the case of a deserter, who was condemned to labor, and pretended deafness, that he might escape his ordinary duties. Foderé, suspecting the imposture, addressed him in an ordinary tone, saying, "you cannot persuade me that you are deaf, but if you confess the truth, you shall have your discharge." The man immediately answered, "very well, I am not deaf."

Numerous cases of pretended deafness are to be found in works relating to military subjects. Mr. Marshall relates the case of "a recruit from Cork, who joined the depot of the East India Company at Chatham. He alleged that he had almost totally lost the sense of hearing, and the testimony of his comrades from Ireland served to support his statement. Dr. Davis, sergeant to the depot, admitted him into the hospital, and put him upon spoon diet. For nine days Dr. Davis passed his bed during his visit to the hospital, without seeming to notice him. On the tenth day he felt his pulse, and made signs to him to put out his tongue. He then asked the hospital sergeant what diet he gave the man. 'Spoon diet,' replied the sergeant. The doctor affected to be displeased, and in a low voice said, 'are

you not ashamed of yourself? The poor fellow is almost starved to death; let him instantly have a beefsteak and a pint of porter.' The recruit could contain himself no longer. With a countenance expressive of gladness and gratitude he addressed Dr. Davis by saying, 'God Almighty bless your honor; you're the best gentleman I have seen for many a day.'"

Self-Inflicted Wounds.—Self-inflicted wounds are made for various purposes, and as we have seen in the Whittaker case, such wounds may be inflicted for the purpose of attracting sympathy, and for cloaking some criminal act that may have been committed.

The case of Bolam, referred to by Taylor, who was tried for the murder of a man named Milly, is one of great interest. "Bolam was found lying in an apartment which had been fired by himself, or, as he alleged, by some incendiary, and near him was the body of the deceased, who had evidently been killed by violence, the skull having been extensively fractured by a poker lying near. The prisoner when found was either insensible, or he pretended to be so. He stated that he had been suddenly attacked by a man and knocked down by a blow on the right temple; for attempting to escape he was again knocked down. He then felt a knife in his throat, but admitted that he did not put up his hands to protect it. His hands were not cut. He remembered receiving some blows on his body; then he became insensible, and recollected nothing more. On examining his throat there was a wound an inch and a half in length on the left side of the neck, a quarter of an inch below the jaw; it had punctured nearly through the true skin, and was of inconsiderable extent. A small quantity of blood which had flowed down on the inside of his cravat had escaped from his wound. There were many cuts on his coat at the back and sides, through his waistcoat, shirt, and flannel shirt, but there were no corresponding cuts or stabs, nor indeed any mark of injury upon his skin. The question was, whether these wounds were inflicted by the unknown person who was alleged to have fired the premises and murdered the deceased; or whether the prisoner had inflicted them on himself, in order to divert attention and conceal the crime which he was accused of having committed. No motive for the imputed crime was discovered, but the medical facts relative to the self-infliction of wounds were so strong that he was convicted of manslaughter. There was no doubt but that the prisoner had inflicted the wounds upon himself in order to remove the

suspicion that he had caused the death of the deceased. They were superficial and involved no important organs, and bore the characteristics which those only would have, which had not been produced with a suicidal intention."

A case which I remember is that of a bank cashier, who was found gagged and tied, and wounded in a superficial manner, while the funds of the bank were missing. It subsequently transpired that the wounds were self-inflicted, and other preparations were made for the purpose of diverting suspicion and to screen him from the imputation of the theft, for which he was responsible.

Sometimes persons who seek damages for alleged injuries will so mutilate themselves, or cut their clothing, as to make their cases much more grave than they really are. Mr. Scribner has told me of a case of this kind, where it had been alleged that the patient's left foot had been injured by the wheel of a car, and sure enough the marks of a slight injury were there found. It occurred to the counsel for the defense to call for the shoe, which was unthinkingly produced by the other side, who fell into the trap, and it was found that the cut shoe belonged to the other foot!

Persons who have unsuccessfully attempted to commit suicide occasionally attribute the infliction of their wounds to another. In these cases the incisions are usually of slight depth and evidently made by the person himself, for they are always in front and, as a rule, made by the right hand. Taylor calls attention to the fact that the hands are seldom wounded in such cases, while in real homicidal attempts we find that in the struggle with the assailant the hands are usually slashed and cut.

In fraudulent cases, where violence is imputed to other persons, excoriations and even skin lesions are alleged to be the result of violence, we must be very careful to see whether the cuts or rents in the cloth correspond with the actual wounds, for impostors are very apt to produce holes or rents in their clothing when removed from the body. A case is related where a young man had unconsciously furnished evidence against himself. He had charged a man with unlawfully wounding him on the highway, and stated that the man had stabbed him on the arm, cutting through his shirt and coat sleeve; but on examining the coat it was found that the cut was confined to the cloth itself, and did not extend through the lining; besides this, there was no motive for the crime.

Tidy refers to the case reported by Marc of a man who had

an "idea of rendering himself so important to a relative as to secure his gratitude, and pretended to have had a murderous conflict with some assassins, although no dead bodies could be found. His head was wounded longitudinally to the extent of about one inch, and in direction from left to right. Only the integuments were divided. His hat of soft velvet was cut off for nearly three inches, and in a direction from right to left. A cotton bonnet and a silk handkerchief which he wore under his hat were also divided. 'So powerful a blow as to divide all these,' says Dr. Marc, 'should have inflicted a less superficial lesion on the head.' The knife used by him in killing the assassin had a thick covering of blood, as if daubed on. Had he really used it to stab through clothes and flesh, he would have rubbed off some of the blood in withdrawing it, and what remained would be in longitudinal striæ."

Dr. Marc deemed the whole case pretended, the effect not corresponding with the force of the ascribed cause.

CHAPTER IV.

EPILEPSY.

We are called upon from time to time to examine patients who present epilepsy as a result of injury ; or whose mental condition is such as to lead them to commit crimes ; or again we are required to give opinions upon the capacity of epileptics who make civil contracts.

Traumatic Epilepsy.—In the matter of traumatic epilepsy it behooves us to distinguish between paroxysmal attacks, which originate from other causes than those which are alleged to have existed, and the purely traumatic variety. The question may arise in such cases whether or not there has been idiopathic disease of long standing, which is connected by a dishonest patient with the accident and may be made the basis of litigation ; or whether an incomplete form of the disease may be developed by a shock or head injury. We are to determine as well, just how much the neurotic taint of the individual may have to do with his aggravated condition. Traumatic epilepsy, as a rule, is apt to be manifested by some dominant form of localized convulsion which is more or less constant, and this is especially the case if there be evidences of injury of the vertex.

Cortical Epilepsy.—Depression of bone on the parietal region is quite commonly attended by hemi-epilepsy, beginning in one of the motor centers receiving its supply from the particular cortical center involved. There is a great irregularity about this form of disorder, and rarely the periodicity found in the idiopathic variety. The attacks are more readily precipitated by exciting causes which favor determination of blood to the head than those of the other varieties. There may or may not be symptoms of meningeal inflammation, but as a rule sooner or later we find the indications of such a condition. The comparatively rapid development of symptoms suggestive of coarse cerebral disease is to be looked for. In an individual who had plunged headforemost into an elevator shaft, striking his head upon the stone flooring ten feet below, I found besides

violent epilepsy the signs of rapid degeneration of the brain mass. In a few months he complained of mental weakness, loss of memory, and great headache as well as double optic neuritis.

The complication of pain in such cases is quite common, and this pain is severe, dull and throbbing. Traumatic epilepsy, I think, is often expressed by *petit mal*, but the violent attacks are those most commonly found.

Head Injury in Epilepsy.—The head injury giving rise to the disease need not leave behind any conspicuous marks, although we find as a rule some scar or depression. Nothnagel* presents the case of a boy who fell a distance of twelve feet upon his head. He was unconscious for fifteen minutes, and after being roused was seized with an attack of convulsions. His only wound was a small one of the scalp, which rapidly healed, and for six weeks subsequently he appeared to be in perfect health. He then had a second seizure, followed by others, and has since had frequent paroxysms, which succeed each other very closely, being separated by intervals of only ten or twelve days. These are preceded by an aura and begin by a turning of the head to the left. Between the attacks the patient has headaches and slight twitchings in the left half of the face or upper arm. The accident occurred when he was eight years old, and when reported he was twenty-one.

His mental condition was one of failure, and his memory was weak. The only evidence of the injury was a small cicatrix, "about the size of a lentil, corresponding to the right coronal suture, and four centimeters distant from the median line. This is not painful or adherent, and when touched either gently or quite roughly no symptoms are manifested."

This example is one illustrating the connection of local head injury with an undoubted lesion of a cortical center, and if it had been a contested case no doubt could have arisen as to the causation of the disease.

Reflex Epilepsy.—Experimental physiology and pathology have shown that irritation or injury of distant parts have given rise to epilepsy. Wounds of peripheral nerves have caused the so-called "reflex epilepsy." Injuries of the sciatic or trigeminal nerves are more apt to give this result than any others, and sometimes when a wound has been made, the cicatricial contraction, such as was found in the cases of Lente and Schnee,

* Ziemssen's Encyclopedia, vol. xiv. p. 208, Am. Translation.

may be the focus of irritation. Such epilepsies are manifested by a sensory aura originating in the cicatrix, and the motor disorders are local or general. In nearly every case of this kind the paroxysms do not occur until some time after the injury. We should be very careful in these forms of epilepsy to give a guarded opinion as to the prognosis, for an operation may relieve the condition.

The prognosis of the ordinary form of epilepsy is bad, and especially is this true of the idiopathic disease. A history of hereditary influence is a most important one. Traumatic epilepsy has a more favorable prognosis, for the chance of relief by an operation is by no means a poor one. In the light of the modern advances in our knowledge of cerebral anatomy and physiology the use of the trephine is more often followed by good results if sagaciously applied.

Mental Condition of Epileptics.—The mental condition of epileptics is most interesting: it is often difficult to determine capacity, and there can be no doubt that there are many cases of doubtful responsibility that may be explained by a history of epilepsy.

The many peculiar mental states that occur in connection with this disease are worthy of the closest study. Epilepsy, after all, is a symptomatic condition itself, and one of importance. Of late many curious forms of temporary mental aberration have been spoken of as epileptoid, and it will at once be seen that in determining the capacity of an individual, either in civil or criminal cases, it may be necessary to determine the existence and influence of the epileptoid state. So important is the influence of the disease that Lutaud says: "Tout épileptique sans etre un aliéné est un volontier candidat de la folie."

We are to determine in cases submitted to us:

1. The influence of the epileptic state.
2. The post paroxysmal mental state.
3. The irregular or aborted epileptic state.

The mental condition of certain epileptics, when the disease begins early in life, or is congenital, is one approximating imbecility. The same may be said to be the case when the disease has lasted for some years, and it is admitted by neurologists that the lesser attacks (*petit mal*) predispose more to mental degeneration than those more severe (grand mal). The victim of epilepsy as a result of infantile brain disease often presents one-sided paralysis with dwarfed limbs, and this may prove to

be a valuable indication so far as the duration of the malady is concerned.

The epileptic is very apt to present, sooner or later, some mental infirmity in connection with the paroxysms. Of 339 cases of epileptic insanity, collected by Esquirol, 145 were dements, 176 suffered from mania which was partial, sub-acute or violent, 8 were idiots, and all but 60 manifested loss of memory.

The Post-Paroxysmal Condition.—The post-paroxysmal states are those which frequently form the basis of homicidal acts, a species of ill-defined and temporary mania resulting ; at other times the patient may be peaceable and quiet.

The third class of cases includes those in which at periods the man may, without any warning and while there is no paroxysm, do some violent act which he knows nothing about afterwards. I have a patient under my care who occasionally loses her consciousness and, though she does not fall to the ground or show any spasmodic action at all, will occasionally strike those about her and call them foul names. She has been known to leave her house and walk several blocks, and to suddenly recover her senses in a shop. There are undoubtedly many cases in which crimes are committed under such circumstances as these, a murderer for instance being entirely unconscious of his crime until after it is committed. A patient under treatment some years ago was a peaceable, quiet man ; he was a devoted husband and father. He had suffered from epilepsy for several years, and had both well marked attacks of grand mal and in addition seizures of an incomplete character. While at the table one day he suddenly changed color, and made a violent demonstration towards his wife, who rushed from him through the open door and down into the street. He followed immediately behind her, and holding a pistol against her body discharged it, killing her instantly. He recovered almost at once and was stricken with horror to find his clothes covered with blood, and his dead wife lying at his feet. No attention was paid to the evidence given in court as to his disease, and he was sentenced to imprisonment for life. His epilepsy has increased since his incarceration.

Clymer upon Responsibility.—In an admirable paper Dr. Meredith Clymer * traces the mental condition of the epileptic as follows:—"In most instances," he says, "an uneasy

*Medico-Legal Reports, vol. 1, p. 446.

depressed and irritable state of the mind, immediately precedes an attack, and there is constantly some disturbance of the affective and intellectual faculties manifest directly after it, which may persist during a large part or the whole of the interval between the fits. The affective faculties chiefly suffer. The disposition is apt to be moody, suspicious, wayward, spiteful and wrathful. Offense is readily taken ; there is a fancy to tease and annoy and be troublesome, and a dread of insult and injury. The moral qualities are perverted, and the sense of propriety, decency or duty is obscured or lost.

"The physical derangements to which the epileptic is liable are exhibited under various expressions. In many cases there is gradual failure of intelligence ending in total mental annihilation, others show anomalies of character and disposition which hardly go beyond harmless eccentricities of conduct, or at most involve a change of temper and habits. In some there may be an extreme perversion of affective life, and occasional explosion of automatic temper fits, in which he loses his knowledge of himself, but is generally content to unpack his mind in words, '—tantum maledicit utrique, vocando. Hanc, furiam ; hunc, aliud, jussit quod splendida bilis,' or there may be those terrible outbursts of maniacal fury accompanied by homicidal or suicidal impulses or both."

The Character of Congenital Epileptics.—The variety of epileptic states when the disease is not suspected is a great one. Maudsley* thus refers to the genesis of the state, analyzing the mental condition of children :

"In children, as in adults, a brief attack of violent mania, a genuine mania transitoria, may precede or follow, or take the place of an epileptic fit ; in the latter case, being a case of masked epilepsy. Children of three or four years of age are sometimes seized with attacks of violent shrieking, desperate stubbornness, or furious rage, when they bite, tear, kick and do all the destruction they can ; these seizures, which are a sort of vicarious epilepsy, come on periodically, and may either pass in the course of a few months into regular epilepsy, or may alternate with it. Older children have perpetrated crimes of a savage and determined nature—incendiarism, and even murder—under the influence of similar attacks of transitory fury, followed or not by epileptic convulsions. It is of the utmost importance to realize the deep effect which the epilep-

* London *Lancet*, July, 1870, p. 646.

tic neurosis may have on the moral character, and to keep in mind the possibility of its existence when a savage, apparently motiveless and unaccountable crime has been committed. A single epileptic seizure has been known to change entirely the moral character, rendering a child rude, vicious and perverse, who was hitherto gentle, amiable and tractable. No one who has seen it can fail to have been struck with the great and abrupt change in the moral character which takes place in the asylum epileptic immediately before the recurrence of his fits; in the intervals between them he is often an amiable, obliging, and industrious being, but when they impend he becomes sullen, morose, and most dangerous to meddle with. Not an attendant but can then foretell that he is going to have his fits, as confidently almost as he can foretell that the sun will rise next day. Morel has made the interesting observation, which is certainly well founded, that the epileptic neurosis may exist for a considerable period in an undeveloped or masked form, showing itself, not by convulsions, but by periodic attacks of mania or by manifestations of extreme moral perversion, which are apt to be thought willful viciousness. But they are not; no moral influence will touch them; they depend upon a morbid physical condition, which can only have a physical cure; and they get their explanation, and indeed, justification, afterwards, when actual epilepsy occurs."

Hughlings Jackson on Epilepsy.—There are light epileptic seizures considered by Hughlings Jackson, which are expressed by the performance of subsequent automatic acts, and these are worthy of the closest study because of their medico-legal interest. Jackson considers four classes of cases. First—Those in which eccentric or grotesque acts alone are manifested. Second—Those in which marked complexity of action *directly* complicated the epileptic attacks. Third—Those that might have a bearing in civil actions, but without criminal importance; and a fourth set of cases which are manifested by violent acts, which give rise to the question of criminal responsibility. Among the first group occur those cases of decided absent-mindedness which lead the individual to do absurd things. Jackson relates the case of an epileptic who, when in an omnibus, blew his nose on a piece of paper and when he left the stage gave the conductor £2 10*s*. instead of the twopence-halfpenny which constituted the regular fare. This man was an epileptic and he probably had a slight attack of *petit mal* immediately before the occurrence. I have at present under

charge a patient who has frequent attacks of *petit mal*, and sometimes at the table rubs her hair with her bread, and does a variety of eccentric things which are often preceded by a well-recognized facial spasm or change in color, but more often not.

The second class of cases includes individuals who perform unconsciously a number of elaborate and compound actions. During the attack itself the individual may go through with a variety of unconscious performances for which he should not be held responsible and the nature of these depends very much upon the disposition and education of the person. I have a patient who when seized will immediately barricade the doors of the room in which he may be and upon the entrance of a member of the family, whom he evidently does not know, will advance in a threatening manner, and, if not held, commits a violent assault; after the return to consciousness the patient will have no recollection of the attack, and upon the occasion when the doors were barricaded he expressed great surprise at seeing the chairs piled one upon another.

Jackson relates the case of a man who detailed the features of one of his seizures as follows:

He says: "I felt symptoms of an attack, and sat down, I believe, on a chair against the wall. And here my recollection failed; the next thing I was conscious of being in the presence of my brother and mother (who had been sent for, as they lived opposite); and I have since been informed by my sister-in-law that she came into the kitchen and found me standing by the table mixing *cocoa* in a dirty gallipot, half filled with bread and milk, intended for the cat, and stirring the mixture with a mustard-spoon, *which I must have gone to the cupboard to obtain.*"

Lighter Grades of Epilepsy.—In these seizures the fact appears that the more light is the fit the more complex is the automatic state, and it can not be disputed that many so-called criminal actions are the result of trifling masked attacks which were entirely unrecognized. Jackson saw a boy, a boot-black, who once after a seizure threw his blacking-box at a policeman and was arrested and fined; and upon another occasion he got into a violent altercation with a gentleman in the street, who, according to his story, had offered him five shillings to clean his boots. This boy ultimately became an inmate of an insane asylum.

Testamentary Capacity and Epilepsy.—The wills of epileptics are sometimes contested. There are few cases, how-

ever, where sufficient attention is paid to the inter-paroxysmal state—which after all is the important question to consider. I append two American cases where the wills of epileptic persons were sustained.

CASE XLIX.—WILL MADE BETWEEN TWO EPILEPTIC ATTACKS. CONDITION OF TESTATOR'S MIND NOT NECESSARILY UNSOUND. WILL ADMITTED.

Matter of Ross, } 12 N. Y. Weekly Digest, 34.

On April 29th, 1879, the testator, who had been subject to attacks of acute mania, superinduced by epileptic convulsions, was committed to a lunatic asylum. He was discharged May 12, 1879. The Superintendent of the asylum testified that testator's mental condition was then good and that between the epileptic attacks he was of sufficient mental soundness to understand what he was doing. On May 21, 1879, testator executed his will. His family physician testified that he was then of sound mind and memory and capable of making a will. Testator was again attacked with an epileptic convulsion on June 11, 1879, and died June 24th, 1879.

Held, that testator was sane at the time the will was made.

CASE L.—EPILEPSY COMPLICATED BY PNEUMONIA. CODICILS MADE WHILE SUFFERING FROM ALLEGED DELIRIUM. WILL NOT SUSTAINED, BUT FINDING AFTERWARDS REVERSED. NO EVIDENCE OF IMPAIRED CAPACITY.

Brown *vs.* Riggin, } 94 Illinois R., 560

Elizabeth M. Riggin was on Nov. 14, 1868, at the age of 62, attacked with an epileptic fit, and rendered unconscious; an attack of pneumonia supervened the epileptic fit accompanied with high fever and occasional delirium, during which she would be unconscious. Previous to her illness she was intelligent and cultivated, robust and strong, though nervous. She was regarded as a gifted and brilliant woman. Witnesses on both sides, who were present during her illness, stated that while occasionally out of her mind, at other times

she was rational and intelligent, her mental condition being clearly the result of delirium attendant on high fever. No witness claimed that she had wholly lost her reason at that period. On Nov. 23, 1868, she executed her will. Between that time and her death, which occurred in July, 1875, she executed three codicils. Each of the witnesses to the will and codicils testified to the sanity and intelligence of deceased at the time of executing them. On the trial of the issues in the Circuit Court of St. Clair County in April, 1877, before a jury, it was found that the will and codicils were not those of the testator, Elizabeth M. Riggin. That is to say, that she was insane at the time she executed them and they were therefore null and void. On appeal to the Supreme Court of Illinois this finding was reversed.

The responsibility of epileptics who commit offenses against the laws, should be determined by careful inquiry into their previous life, the existence of disease and the nature of the crime.

The discovery that the patient's progenitors have been insane, that if she be a woman she has suffered from migraine previously, or from menstrual difficulties, will, perhaps, supply a clew to follow up. There may be a history of "fainting attacks," that if closely investigated, will be found to have been of an epileptic nature, and some one may remember a head injury or an attack of sunstroke.

Le Grand du Saulle suggests the following medico-legal applications in relation to epilepsy :

When the character and habits of the patient are full of strange anomalies, and there are startling and sudden impulses, the responsibility should be questioned.

The patient who has clearly committed an attempt when not suffering from an attack, is partially responsible, but he has the right, after examination into his mental state, to an extenuation of the penalty, and in some way proportionate to the degree of moral resistance which can be opposed.

A motiveless crime, committed under the immediate influence of an epileptic paroxysm, is evidence of absolute irresponsibility.

When the crime committed by the epileptic is deliberate, and bears upon its face its explanation, the author is irresponsible.

When a crime is not to be accounted for, and completely inconsistent with the antecedents of one who is not known to be epileptic or insane, and when it is accomplished in a moment of fury, then we should examine whether there are aborted or nocturnal attacks of epilepsy.

Incomplete attacks of epilepsy, or epileptic vertigo, should be suggestive facts in determining the intellectual, moral or affective standing of the individual.

"Georgét not only commends these verdicts of acquittal, but, also recommends that for acts committed in the intervals of calm, the epileptic should be punished less severely than ordinary criminals.

"This opinion has been again concurred in by M. Bottex, in reference to two patients—one of a naturally mild temper, who put to death in a paroxysm of fury, a woman who made certain representations to him ; and another, constantly dull and stupid, who was offended by the coquettish dress of a young girl of fifteen, and stretched her dead at his feet with a blow of a goyarde. The latter, freed without trial, was placed in an asylum as a measure of public security" (de Boismont).

In some cases of epileptic insanity there is a state of mental disturbance, after the attack, when the patient becomes the subject of religious delusions.

Of fifty cases reported by Addison, thirteen patients were *always* irritable and vicious ; thirteen were vicious only *before* the fit and twenty-six *after* the fit, and in four there was no mental change.

In epileptic insanity we should look out for the signs of previous attacks, such as scalp-wounds, burns, and other evidence of injuries that may have been received during a paroxysm. The occurrence of limited spasms, vertiginous attacks, paralyses, the history of syphilis, and the question of heredity should be considered as well.

In many cases the epileptic paroxysm is always attended with homicidal attempts, and the patient may appeal to bystanders to take charge of him when he has an aura. Such a case was reported by Marc, the patient being a peasant, aged twenty-seven, who had epilepsy for nineteen years. When he felt a warning he would ask for protection, saying : "When the feeling comes over me I must kill some one, if only a child."

Maniacal rage of short duration is often epileptic in character, and its true character is often mistaken.

The cases of epileptic insanity with homicidal tendencies are numerous. The following is one of a common type, and was reported by Dr. Gray :

"Man, single, aged eighteen, reads and writes, smokes, temperate, native New York, not hereditary. Was subject to attacks of epilepsy from the age of twelve years. The fits varied in frequency from one a month to several daily, and their dura-

tion from five to fifteen minutes. After the occurrence of the disease he made little progress in his studies. There was also a marked change in his character, he lost self-control, had periods of excitement, and was at times ugly, was emotional and governed by his passions. He had been sent on two occasions to a hospital for treatment without any benefit. His father was a carpenter, and though he was not capable of learning the trade he acquired some manual skill, and occasionally did work for a widow who kept a variety store near his residence. He was fixing some shelving for her, when about mid day she was found murdered in her store ; her body was much mangled by having been cut with a hatchet. Search was made and the patient was arrested as he was walking the street, his hands and clothes stained with blood. His epileptic and irresponsible condition was proved, and he was sent to the asylum by order of the Court. He remained some twenty months, and during this time improved materially. His seizures were infrequent, and he gained in mental strength. At this time he eloped from the asylum through the connivance of his friends and enlisted in the army."

Insane impulses may exist in insane epileptic patients and not be directly connected with the paroxysms. A patient at the Utica Asylum had the following history :

"Man, aged twenty-five, uneducated and vicious. Had epilepsy induced by intemperance. Became quarrelsome, considered himself injured, and in a rage would attempt to stab those whom he disliked. At time of admission to the asylum exhibited no marked mental aberration. Soon began to become demented ; was always a dangerous man ; invariably made his attacks in the day time and on persons whom he disliked, and never threatened or used violent language. The homicidal tendency was not constant, but at times attended with strong suicidal disposition, which occurred independently, so far as could be observed, of his epileptic seizures. He was discharged after some years, demented and harmless."

Realization of Crime by the Epileptic.—The epileptic often realizes the terrible nature of his impulses and begs for protection ; and in his sane state realizes with redoubled force the horrible character of what he has done and what he may do. He is also tortured with the knowledge that his mental perversion will not be appreciated by others. He may suffer from ordinary epileptic attacks which are not connected with any homicidal tendencies, but finally, under the influence of

perhaps an epileptic hallucination, may commit some act of violence which to the layman has apparently nothing to do with his previous trouble.

Nocturnal Epilepsy.—The epileptic may give no indication of his real condition, the attacks perhaps being entirely nocturnal, and he as well as others may be in total ignorance of the existence of the disease. If such a person commits a crime it is hardly necessary to say that its connection with epilepsy will be disregarded unless the character of the violent act be in itself suspicious. Upon careful inquiry it may be found that the individual has had unconscious passages of urine in his bed or his pillow may have been found stained with blood. An examination may reveal cicatrices suggestive of tongue biting—in fact there may be every reason to believe that he has had well marked epileptic attacks occurring during the night. Clymer refers to the cases reported by Duménil and Morel ; the first of a soldier who struck his superior officer and who was subject to sudden fits of passion upon slight provocation, and it transpired, from the statements of those who slept with him, that he had had epileptic attacks at night for several years. In a case of my own the patient occasionally found herself in the morning lying at the foot of the bed with the bed clothing twisted about her, and upon several occasions her tongue was sore, and her mouth contained blood. Subsequently she had well marked attacks in the day-time.

I have spoken of the detection of nocturnal epilepsy by the appearance of blood upon the pillow, and by involuntary discharges of urine. A case reported by du Saulle is of considerable medico-legal interest, the subject being a young man, an army officer, who was accused of desertion before the enemy, and his punishment would have been severe indeed if it had not been for the fact that his conduct was explained by epilepsy, which had not been detected, and was not suspected until the fact was ascertained that he had incontinence of urine and nocturnal attacks.

Tardieu refers to cases where the connection of nocturnal discharges of urine with epilepsy was clearly established, and relates the case of an elderly woman, whose friends sought to place her under restraint, because she made motiveless assaults upon them ; but an examination of her mental condition failed to reveal any sign of disease. Her intelligence was ordinary, her memory being alone affected, and after a long examination Tardieu had almost made up his mind she should not be commit-

ted, when he accidentally learned that she had a vesical trouble. His suspicions were excited, and after a series of questions he ascertained that she had for a long time complained of incontinence of urine, migraine, and undoubted vertigo of an epileptic character, which had lasted for fifteen years; and it was beyond dispute that her attacks of violence were epileptic.

The case is related by du Saulle of an English lord, who was shot in a drawing-room in London, by one of his secretaries, who was laboring under a fit of irascibility. No explanation could be given for this conduct, and Lord ——— could not think of any provocation, for he had always been on the best of terms with the young man, and there never had been any misunderstanding. The author of the criminal act was arrested in Paris, as he was about to leave a well-known restaurant, and du Saulle was requested to examine him. The man was twenty-seven years old, had passed his urine in bed two or three times a month, his father had died of chronic alcoholism, and a younger brother had committed suicide. He declared that he had no knowledge of what had passed and expressed great happiness at not having killed Lord ———, whom he had always respected and loved. The accused presented numerous traces of tongue-biting, and du Saulle diagnosticated nocturnal epilepsy. The young man afterwards became insane, and was treated by English physicians for his trouble.

Epilepsy and Hallucinations.—The crimes committed by epileptics are often prompted by hallucinations. I have, in another place, alluded to those sensory forms of epilepsy in which hallucinations take the place of the ordinary disturbance of motility, and it is easy to conceive how the insane condition may cause the individual to convert these into delusions. Brierre de Boismont refers to the case of "An epileptic who after abandoning himself to great violence in a church, went into a field and killed three persons. On coming to himself he exhibited the greatest sorrow. In his frenzy he imagined he saw flames. His sequestration was very judiciously ordered."

The Question of Memory in Relation to Epilepsy.—As I have shown in a previous case, the epileptic may commit the most terrible crimes during a paroxysm and yet be subsequently entirely unconscious of what he has done.

Delaisauve reports the following case:

"Joachim Haeve, for a long time an epileptic, atrociously

murdered, July 19, 1826, a girl named Lange, aged eleven years. She was gathering wood in the court yard with the murderer's nephew, when he descended in his shirt, turned back to strike his nephew, who offered him something to eat, but not succeeding pursued the other child, who had fled from fear. The presence and the cries of the mistress of the establishment, far from serving to intimidate him, seemed only to increase his fury and to excite him, under a ferocious impulse, to repeat useless mutilations of the body.

"The individual, naturally mild and peaceable, had always manifested an affection for children. Ties of kindred and of friendship united him to the family of Lange, against whom besides he had no subject of animosity. Series of attacks intensely severe succeeded each other. It was proven that, on the 16th and 17th, two days before the catastrophe, he had had several; on the 18th he exhibited a strong repugnance to food; on the morning of the 18th a witness saw him in bed in profound stupor, and breathing stertorously, which led to the belief that he had just passed through a paroxysm.

"Haeve had but a vague remembrance of the scene which had transpired. He could recall only the feeling of disgust he experienced the night before for nourishment,—of some soiled linen which he had carried to his sister-in-law,—and of resting in the evening before his door half dressed; and according to his own statement, this species of dullness always followed his convulsive attacks. He recovered his moral equilibrium slowly; and even when lucidity seemed restored, the least attempt to rise or to dress himself brought on exhaustion, cephalalgia, and loss of perception."

The ability of the patient to remember the nature of the crime is not always lost. In cases of aborted epilepsy it may be so—(that is in cases in which the patient immediately before and after the crime was apparently sane)—but in the mania of epilepsy we find numerous cases of patients who have detailed their actions.

"Josephine D———, subject in consequence of repeated epileptic attacks to habitual dullness, who had taken a young girl of six years into a lonely place, strangled her, and afterwards stolen her ear-rings. This unfortunate person herself detailed the circumstances of her crime." This woman was acquitted (de Boismont).

Epilepsy and Marriage.—The following case, which is well known in the literature of medical jurisprudence is one in

which a marriage contract, entered into by a lunatic who had murdered his father-in-law during the ceremony, was set aside: The patient was a shoemaker 20 years of age whose epilepsy began some years before, having been brought on by injury due to a fall. At first the attacks were attended by but slight mental aberration, but later he became maniacal for a period of two or three days when the paroxysms occurred, and would make threatening demonstrations. At this time he resolved to marry and two days before the time agreed upon for the wedding, severe pains in the head warned him of an approaching attack. He requested a physician to bleed him, as this operation had usually given him relief at previous times. The physician declined to do so. He was however bled two days later, a few hours before the ceremony, without beneficial result. During the ceremony he seemed moody and reserved, said nothing but "yes." The pain in the head increased in severity so that he, on returning to the house of his father-in-law, was obliged to go immediately to bed. While the guests were at dinner he became very violent, rushed into the dining room, and attacked and chased several of the guests out of doors. He then obtained a knife, said he must kill them all, and succeeded in killing his father-in-law before he was overpowered.

After three days the delirium passed off, and he then could remember nothing that had transpired after the marriage ceremony. He was committed to an asylum and the Court was applied to to nullify the marriage upon the ground that he was insane at the time the ceremony was performed, the counsel taking the view that the headache, the moodiness and taciturnity were evidence that his mind was at this time diseased.

The Court declared the marriage invalid.

Unsuspected Epilepsy and Divorce.—The existence of epilepsy which has been concealed by the subject from the other contracting party, may arise in proceedings for divorce. A case *apropos* is related by Trosseau of a lady who was aroused at night by the restlessness of her husband, who violently attacked her and she was obliged to call for assistance. This occurred again, and by means of a light she was enabled to see the patient in the midst of a severe epileptic attack, and he would again have done violence if not restrained. In this case the patient had but an indistinct idea afterwards of his condition, but he admitted having had other attacks previous to his marriage of a vertiginous character. Hence it seems to

me there should be no reasonable excuse for denying a divorce, especially if the patient was cognizant of his previous disease, and neglected to communicate his knowledge to his wife.

Horrible Nature of Crimes.—The crimes of violence committed by the epileptic insane are nearly always of a most horrible nature, and while the ordinary maniac or melancholic may kill some one in obedience to the dictates of a delusion, the method employed is usually commonplace, and there seems to be no delight in the contemplation of the death of the victim. The murderous expression of the psychical state of the insane epileptic is usually in some unnecessary and ill-directed way.

A curious case came before a commission a few years ago in New York, the prisoner being an Irish woman named Jumish who placed her infant child upon a red hot stove. She was indicted and tried and sent to the State Asylum at Utica. She had been an epileptic for nine years and had had an epileptic convulsion one hour before the deed.

The Walworth case. — The somewhat famous trial of young Walworth for the murder of his father, occupied the attention of the courts a few years ago, the son being found guilty after the defense of epileptic insanity was urged. The elder Walworth was a man of ungovernable temper, and was exceedingly abusive and violent to his wife who was the mother of a large family of children, the eldest of whom was the parricide, Frank. After a serious domestic scene the murdered man came to New York and was followed by the son who first went to a boarding house where his father had been in the habit of staying, and, not finding him there, went to the Sturtevant House from which he dispatched a note inviting his father to call upon him. The latter came the next morning, and going to his son's room was shot by him during an altercation, and, after the deed had been accomplished, the murderer rushed down to the clerk at the desk, telling him what he had done, and afterwards sent a telegram to his uncle stating that he had shot his father three times, and asked the uncle to take care of his mother. He then proceeded to the station house in Thirtieth street and surrendered himself, giving up his pistol and acknowledging the act, alleging as an excuse, that his father had threatened to kill his mother and her children. His manner was perfectly calm and collected

and his subsequent bearing in court was dignified and unruffled. He had always been a boy of good morals and was intelligent and universally liked. The son had been present at more than one quarrel between the father and mother and at these times, according to the testimony of the mother, "he showed extreme pallor, and I noticed a pinched look on his features expressing severe suffering, both mental and physical; it alarmed me so much that I did not, on his account, afterwards tell him; he was very quiet and simply said 'That this must not be!' On this occasion, in January, as soon as I myself recovered, I noticed the same symptoms; when he came in he had his hand on his father's shoulder, and said, 'Be quiet father;' there was no further violence by his father; after the first occasion I rarely spoke to Frank of his father; we very rarely spoke of him; on a few occasions during the first few months when I was receiving Mr. Walworth's letters, I saw him reading them, and noticed some of the same symptoms each time; afterwards, when I ceased to receive them, I frequently noticed similar symptoms without knowing the cause, and thought his health was affected; once I saw him most violently affected, as I knew next day by receiving the letter which he had read; I called up one of the children saying: 'Frank is sick;' I went up and found him with his body rigid and this pallor of which I have spoken; I applied such restoratives as I could, and he shortly fell into a profound sleep for an hour; I noticed similar symptoms on various occasions, in greater or less degree; he was, before I let him know about his father, a very gay, joyous boy; after that he was at times very quiet and abstracted; there was a notable failure of his memory; we used to laugh at his absent-mindedness; he would go to his room for some article of dress to go out and come down without it; go down street and forget his errand, and after locking up the house would go round to lock up again, sometimes two or three times; he was abstracted at the table; several times screams from his room woke me up and I went to his door; his pillow was stained at times; I saw Frank the Monday he left Saratoga; I noticed his extreme paleness then; noticed his great paleness; when he was in his fits of abstraction he generally had a sad look; he was always courteous to others, but before this he was lively; he was not subject to fits of anger; his character, so far as I know, was invariably good, both as to amiability and uprightness; there was nothing to call a vice, or, in the ordinary sense, an irregularity in him; he was always amiable and kind in the family, but not demonstrative;

he had never in my hearing uttered any threats against his father."

Several physicians were called by the defense as well as servants and others, to prove the existence of epilepsy, and it appeared that he had nocturnal attacks, that blood-stains had been found on the pillow, that he had convulsions and frothings at the mouth while at Saratoga, and that on one occasion while playing ball he became insensible for half an hour. A friend, Dr. Grant, testified to the existence of attacks which were apparently epileptic and were connected with strange alterations of behavior.

Dr. John P. Gray gave general testimony regarding epileptic insanity, and believed the prisoner to be irresponsible. Dr. Parsons was called for the people, as were Drs A. O. Kellog and Meredith Clymer. Their testimony was substantially to the effect that the homicidal act in this case was not performed while the prisoner was in an epileptic condition, and that he did not suffer from epileptic mania at the time. The prisoner was found guilty of murder in the second degree, and he was sentenced to State Prison for life. He was, however, subsequently transferred to the Utica Insane Asylum and discharged.

Although in this case there is an undoubted history of epilepsy which had lasted for years, and the boy's character had undergone a decided change, there was nothing in the nature of the homicide to lead us to believe that the crime was executed while the prisoner was in an irresponsible condition, or was influenced by a paroxysm. There is no evidence that his mental state at the time of the murder was that known as the post-paroxysmal; on the contrary, there is the history of motive, premeditation and deliberation. The pistol was brought from Saratoga for the purpose, the father was entrapped and lured to his destruction, and the behavior of the prisoner subsequent to the killing was not that of an irresponsible individual.

In such cases as this, therefore, we are to distinguish between crime that is the direct result of the epileptic attack, and crime that may be performed through motives of an ordinary kind, even though the person has had epileptic seizures at other times, and it does not follow that the disease in question must necessarily make the subject irresponsible.

Feigned Epilepsy.—Epilepsy is a disease that is feigned very often by sailors, soldiers and convicts who wish to shirk

work and gain the comforts of the hospital. Mendicants and impostors are also apt to impose upon the charitable, and it occasionally happens that instances occur of some importance, where the turning point in a law case is the question of epilepsy. The epileptic paroxysm may be counterfeited by a clever person, or one who is familiar with the features of the disease, so that the casual observer may be deceived, but such is not the case when the bystander happens to be a medical man. There are certain changes that are clearly involuntary, and cannot be produced by any effort of the patient. The pupils, during genuine epilepsy, are dilated, and the pulse and coloring are peculiar. The lividity, dusky pallor or suffusion cannot be shammed, and the epileptic is apt to indulge in movements which are in no way like the clonic convulsions. A sign noticed by some observers and declared to be pathognomonic, is the flexure of the thumb in the palm ; the fingers holding it down. This, however, is by no means constant. Browne refers to a German case, where the threat of a medical officer stopped the recurrence of attacks in a patient who was shamming. I have known of cases where the impostor has actually suffered all manner of injury rather than confess, and the noted Clegg, "the dummy clencher," threw himself in one of his pretended attacks, from a corridor in gaol to the floor, a distance of nearly twenty feet. Of course such utter disregard of self as this is apt to deceive almost any one. The simulator is apt to betray his knowledge of the supposed behavior of the true attack, and occasionally overshoots the mark. Percy reports a case where the pseudo-epileptic demanded in a loud voice the instruments necessary to remove his testicles : a supposed popular method of curing the disease.

Sometimes the impostor will produce frothing by the insertion of a piece of soap in his mouth. In suspected cases it will be well to smell the prisoner's breath or examine the froth.

If watched closely the malingerer may look about him, or show some interest in the effect his actions produce. In many instances the false epileptic closes his eyes.

The physical peculiarities of the genuine epileptic are very decided, both in the interparoxysmal condition and during the seizure. The epileptic usually presents an expression of stupidity and his eyes are vacant and dull. His lips are swollen, and both these and the tongue may be found to be the seat of cicatrices indicative of former injury. His head and face often present the evidence of previous falls, and if the case be an old one the facial folds will be found to be deepened. The ex-

tremities are cold and the venous circulation stagnant. Sometimes we will find the existence of crops of acne the result of bromism. His manner betrays lassitude and he has little muscular force. He is inclined to stoop, to shuffle along and be quiet and morose. Gavin alludes to the harsh voice, "the enlargement of the alae of the nose, the thinness of the arms and legs."

"When the fits have been frequent, the anterior part of the inferior incisors are found obliquely worn down. In a real and most severe case of epilepsy occurring in a criminal at Paris, the teeth were found worn at every point where the upper had come in contact with the lower jaw. The lower incisors in particular were extremely worn at their fronts, and yet the individual was only twenty-two years of age The pupils are dilated and the conjunctiva blanched and humid. The simulator can imitate none of these appearances."

If the character of the pulse is carefully noted, it will be found that in true epilepsy it is hard and slow, and in the feigned disease it is full and quick, as a result of the muscular exertion.

Voisin Upon the Sphygmograph and Epilepsy.—Voisin has shown that in true epilepsy the sphygmographic tracing shows a few seconds before the attack of grand-mal a change which consists in a decrease in height of curves, which are more round and closer together. When the attack supervenes, two or three little successive undulations in the ascending stroke, afterwards a series of slightly elevated curves. The curves are more marked, and present a superior convexity, which give the idea of the half of a circle; then, at the end of several minutes the lines are lengthened perpendicularly to a height three or four times greater than before the attack. The duration of this pulse-form varies from half an hour to an hour and a half, sometimes several hours after the attack.*

Clegg, the "Dummy Chucker."—Dr Carlos MacDonald relates the case of Clegg, the "dummy-chucker," a clever impostor who feigned epilepsy for some years so successfully as to deceive the police and many well-informed physicians. The following abstract† is from Dr MacDonald's paper. Clegg had in England carried on his impostures for many years quite successfully.

"After his discharge from prison Clegg returned to his na-

* *Annales d'hygiene*, etc., 1868.

† *Boston Med. and Surg. Journal.* Jan. 6. 1881.

tive city, immediately robbed his aunt, fled to London, thence to Glasgow, where he robbed a house of four hundred pounds, and then sailed for America. Landing in New York he recommenced dummy chucking, which, he says, was something new to the 'crooked people' of that city. He joined a gang of pickpockets, and operated in New York, Philadelphia, and Boston. Large retail houses afforded a rich field, lady customers being especially victims during their consternation at sight of a well-dressed young man writhing on the floor. The ferry-boats, when crowded, offered excellent opportunities. On one of these occasions a kind-hearted physician came to his assistance, and *meanwhile was relieved of his watch.* Unaware of this, the doctor, on landing, called a cab and took the scamp to his own office, where, after considerable effort, he succeeded in 'restoring' the patient, about the same time discovering the loss of his watch. Clegg expressed great sorrow and denounced the outrage, but the doctor consoled himself by the reflection that the loss of the watch was of little consequence compared with the life he had been instrumental in saving. Clegg admits that for once his conscience smote him, and avers that he really tried to get the watch for the purpose of restoring it to its owner, but it was 'sold' before he got back to the city again. On another occasion he feigned a fit on a Fulton ferry-boat, and was taken in an ambulance to Bellevue Hospital. After pretending to sleep for an hour or two at the hospital he 'recovered;' but the authorities were suspicious and detained him, as the nurse informed him, for the purpose of having him examined by one of the physicians of the Hospital for Epileptics. In due time the physician from the epileptic hospital arrived, and Clegg, who was on the alert, hearing the nurse say, 'There comes the doctor,' feigned a fit, and was in 'convulsions' when the latter reached his bedside. The doctor, after watching him a few moments, depressing his eyelids, trying his pulse, and observing the numerous cicatrices on his face and forehead, expressed the opinion that it was a case of epilepsy, and Clegg was discharged.

"Subsequently he was sent to Blackwell's Island Prison for stabbing a man. Here the chief of staff of Charity Hospital pronounced him an epileptic. His next commitment placed Clegg in Sing Sing Prison. Here his 'dummy chucking' became the means of his transfer to the Asylum for Insane Criminals at Auburn. At this place Dr. MacDonald, on assuming charge, found Clegg in a strong room and in restraint. He

was said to be 'subject to terrible fits.' Dr. MacDonald ordered his release from restraint, requesting notification should a fit occur. Shortly after he was called. He found Clegg on the floor, his face distorted and livid, saliva, frothy and bloody, oozing from the mouth; body apparently violently convulsed. Two patients were holding his limbs. He seemed to be having a series of rapidly recurring convulsions, each one commencing with marked muscular rigidity, the head being drawn to one side, the body twisted upon itself. Thoracic muscles rigid, respiratory movement almost completely arrested. This tetanoid condition was quickly followed by one closely resembling clonic convulsions: there were alternate contractions and relaxions of different portions of the body, during which his head was frequently brought into such violent contact with the floor as to abrade the scalp; his tongue was wounded; respiration jerking and noisy, and at each expiration bloody saliva was forcibly ejected from his mouth. Pulse somewhat accelerated; eyes turned upward as far as possible; pupils moderately dilated. (It should be stated that the room was partially darkened by a window screen, kept locked. This would account for the dilatation of the pupils.) 'His hands were tightly clenched, but I observed that *the thumbs were not closed within the hands*, also that *the finger nails were not livid*, and *when I forced his hands open he immediately closed them again. There were also no visible indications of relaxed sphincters.* The "clonic convulsions" were followed by a condition of muscular quiet, immobility, and stupor, lasting for a few moments, during which he would occasionally open his eyes and gaze around in a confused and stupid manner, when, suddenly, another "spasm" would supervene. The series of seizures lasted about an hour, followed by a pretended sleep, after which Clegg appeared to be mentally confused for a day or two, and complained of headache and physical weakness.'

"On this occasion Dr. MacDonald intimated, in Clegg's hearing, that he was an impostor, although he confesses he was not positive at the time, but deemed it safe to assume from his history that the rogue was shamming. Attendants were instructed to impress upon his mind that the doctors regarded him as a fraud. The next time Dr. MacDonald met Clegg he accused him of feigning. The man stoutly denied it, calling attention to the scars on his head and face, asking if the doctor thought he would purposely hurt himself like that, and adding that he had been subject to fits since he was three years old. The doctor's suspicions were again awakened by the next fit, which

began *soon after he entered the ward.* He again said the fellow was shamming, and that, while his acting resembled epilepsy, it lacked certain characteristic features, the absence of which stamped it as counterfeit. Clegg subsequently told the doctor that this announcement staggered him. 'For,' said he, 'I have studied the subject in books, have seen a great many epileptics in fits, and have practiced it for fifteen years, until I thought I knew every symptom of it.' After he had recovered from this 'attack' the doctor watched him on occasions when Clegg was unaware of his presence, and was struck with the cheerful and vivacious aspect of the man's countenance, as compared with his facial expression during the ward visits. Clegg could easily assume the peculiar indescribable look habitual to epileptics. This, together with the cicatrices on head and face, might easily deceive even a skilled observer.

"By this time Dr. MacDonald felt justified in insisting upon a confession from Clegg, who still denied feigning, but with less emphasis, until, the doctor forcing him still more, he laughingly admitted that the fits were simulated, but mildly urged that he was a victim of *real* epilepsy. This Dr. MacDonald refused to admit, and threatened him with unsparing punishment in the event of another 'fit.' After brief reflection Clegg said, 'Well, I guess it's no use, but you are the first doctor that ever tumbled to me.' His countenance then underwent a decided transformation, the epileptic look vanishing at once. He was transferred to Auburn Prison as *not insane*, and was released in December, 1876. He next went to Boston, where he resumed the practice of 'dummy chucking' in connection with a gang of pickpockets, and afterwards followed the Marquis of Lorne to Canada, chucking dummies in the crowds that gathered. Returning to New York, he was sent to Sing Sing for burglary, and there played epilepsy, which again sent him to the Auburn Asylum as an 'epileptic imbecile.' Meeting Dr. MacDonald in the ward, he threw off his epileptic mask, laughing heartily. On this occasion, at the request of the doctor, he feigned a fit, first borrowing a pocket-knife, with which he calmly cut the side of his tongue; then, uttering the 'epileptic cry,' fell violently upon the floor in a 'convulsion.' He afterward repeated the fit in the presence of two other physicians.

"Clegg made a practice, while in prison, of complaining of vertigo, tinnitus aurium, etc., between the paroxysms. When asked what remedy he had taken he always replied, 'Bromide,' knowing that was 'the medicine the doctors give for epilepsy.'

Realizing that if he fell in such a manner as to avoid injury suspicion would be aroused, he never selected a 'soft place' on which to fall. Reynolds* remarks that 'choice of locality (for falling) does not prove that epilepsy is feigned; the absence of choice, on the other hand, is presumptive evidence that it is genuine; and this in proportion to the danger or the privacy of the locality in which the fall occurs.'

"'Cicatrices on the skin of the face,' says Gavin, 'made with the design of presenting incontestable proofs of anterior falls, never exist without tending to deceive the medical man.' Clegg sets a high value upon the scars upon his head and face, acquired through falls. He says they have often served as aids in diagnosis to examiners who have pronounced him 'an epileptic.'

"'In conclusion,' says Dr. MacDonald, 'these are the grounds upon which the opinion that Clegg was not an epileptic was based: First, he was a convict, sentenced to hard labor,—this furnished a strong motive for feigning, and suggested suspicion; second, the occurrence of a paroxysm during my visit to the ward; third, the readiness with which he spoke of his complaint, and called attention to the cicatrices on his face and head; fourth, the marked change in his facial expression when he supposed he was unobserved; fifth, during the spasms the thumbs were not closed within the palms, the nails were not livid, muscular rigidity could readily be overcome, and the hands, after being forced open, immediately closed; sixth, the sphincters were not relaxed; and, seventh, there were no ecchymoses, extravasations, or minute petechial spots observable upon forehead, throat, or chest. The presence or absence of pallor was not determined by observation in Clegg's case, nor was any value attached to the condition of the pupils.

"As regards the question of pallor, Dr. MacDonald agrees with those who maintain that it is not a constant symptom attending the onset of epileptic seizures. Reynolds speaks confidently of its absence in some instances. In a total of forty-five observations recorded by him, 'pallor was observed in but little more than one-fourth of the cases.' Owing to its exceedingly evanescent character, its presence can be determined only in cases observed from the very commencement of the attack. My experience leads me to conclude that, as a rule, in general practice, persons suffering from epileptic attacks do not come under medical observation until the 'pallid stage' has passed.

* Epilepsy, its Symptoms and Treatment, page 285.

Of course it cannot be feigned ; and while its recognition might warrant the dismissal of suspicion of shamming in a doubtful or suspected case, its absence in a given case would by no means justify a verdict of feigning.

"Respecting the condition of the pupils during an epileptic attack authorities are also divided, some claiming that the iris expands, a few that it contracts, while others declare that it oscillates. *The important point relating to the condition of the pupils in epilepsy, as regards its diagnostic value, is that during a paroxysm they are insusceptible to the influence of light.* This fact would be of great service as a means of diagnosis of feigned epilepsy, but for the difficulty of determining its presence or otherwise in a person violently convulsed."

The Case of Max Klinger.—As I have said there are cases where the defense of epilepsy is a somewhat difficult one, the courts refusing to take into account what seem to be problematical excuses for the prisoner's conduct. The case of Max Klinger, a boy of 18 years, is reported by Dr. Banding. Klinger was a tailor apprentice to his uncle, whom he murdered. The victim was engaged making a fire in the stove when Klinger approached him from behind and fired a pistol, which he held close to his head, killing him instantly. When the murdered man's wife rushed into the room she was struck down by the boy, who escaped, after taking what money he could lay his hands on. He was arrested and confessed his crime,alleging as the motive that the uncle had angered him. The prisoner was convicted. It transpired subsequently, that when in Germany the prisoner, when a child, had a fall from a height of thirty feet, which rendered him insensible, and produced a wound followed by depression of the skull which has existed since. After his fall he had been subject to fits and suffered from temporary insanity, and that there was a strong family history of insanity and epilepsy. As the result of this fresh evidence a new trial was granted, but the prisoner was again convicted. Dr. Clymer in commenting upon this case alludes to many contradictory and inconsistent features, showing that at best the existence of epilepsy was doubtful. It did not appear that the prisoner had actually had an epileptic attack upon the morning of the murder. In fact there was no evidence at all except that given by a fellow prisoner that he had had one before or after the murder. Clymer alludes to the ingenuity and shrewdness of the prisoner as manifested in his written account of his disease,and I may be pardoned for repeating it. It will be seen that the

patient "throws all responsibility for the crime on his epileptic disorder."

"This event would not have happened," the prisoner writes, "if I had not received the sickness just on the 29th November, 1869, (the day of the murder), for I do not think that I will get the sickness on account of all these troubles. I had often said it in German that I should get the sickness about this time, and nobody should enter the room until I locked the door myself, for I get so crazy that I do not know what I am doing. It is dangerous for any one to be seen by me when I get the sickness. The doctor in Germany said to my parents that I would become dangerous during my sickness. I am very sorry that I was so unfortunate. I had the sickness on the 25th November, and, unhappily, the boss entered; I saw him, he came toward me and looked at me, when I struck at something; then I saw that he wanted to come at me, and wanted to hold me and I got so intensely crazy that I did not know what I was doing. How I got the revolver in my hand I do not know nor how he lay there. Then she ran towards me and wanted to strike me. I did not know with what I struck her. But when I came to my senses I saw what I had done and was scared, and I left immediately. If I had premeditated this, I would have sent my clothes to some place. I kept the pistol by me every morning because we had in our neighborhood about ten Indians. Every morning I was first in the store and was afraid of these fellows." The above statement is clearly suggestive of rank deception. It is entirely at variance with the declaration made by him after, that he was angered and committed the crime out of revenge, and shows a memory of all the circumstances which is quite unusual in epileptic homicide. In fact, it would appear that the murder was a cool and premeditated one, for he had stated to the coroner that he had made up his mind to kill his uncle the night before.

Deliberation is inconsistent with epilepsy, and just as in the case of Walworth it appears that crimes may be committed by epileptic persons who are perfectly responsible and where there is no direct connection between the paroxysmal condition, either masked or pronounced, and the consummation of the crime. Epileptics rarely use concealment, and their impulsive acts are executed as freely in open daylight as at any other time, or in the public thoroughfare as frequently as elsewhere. Other cases have been decided in the same manner as those of Walworth and Klinger, and that of Roegiers was one of the same kind in which there was well marked premeditation in the commission of a

homicide, and though the prosecution admitted the existence of epilepsy in the defendant, he was promptly convicted. In this case, however, the patient was evidently irresponsible, for his attacks of epilepsy were associated with periods of maniacal excitement, when he would threaten and warn those about him; and it was testified that Roegiers had gone so far as to sharpen a knife upon a grindstone, exclaiming from time to time, "I'll have your head." He subsequently sought his victim and brutally murdered him.

Homicidal acts may be committed by insane persons in whom epilepsy has been a feature of the disease, but where there is no reason to believe the crime is a feature of an epileptic seizure, under the influence of hallucinations such acts are committed, and sometimes there is great premeditation and concealment of plans.

Such a case is related by Brierre de Boismont:

"The lunatic who some years ago killed Dr. Geoffroy, chief physician of the Avignon Asylum, was epileptic and subject to hallucinations. Several days before the murder he heard a voice which said to him, 'Kill the doctor; if you don't, you'll be unlucky.' His conduct established, in the clearest manner, that he had contrived his plans and acted with judgment, facts of which we have repeated proofs. When the doctor came he complained of a pain in his foot, begged him to examine it, and while the medical man was stooping, seized him round the body, and plunged into his left side a piece of iron that he had sharpened some days before for this purpose. Although it was certain that he had meditated upon his project, and waited for a favorable moment to put it into execution, his antecedents and the examination left no doubt as to the derangement of his faculties and his continuous state of madness; he was not, therefore, brought to trial.

Occasionally we find that homicidal assaults are made upon superintendents of asylums and others by epileptics which are chiefly dictated by motives of revenge, growing out of their detention. In such cases the commission of violence may not be dictated by delusions, hallucinations or any insane impulse.

CHAPTER V.

ALCOHOLISM.

The relations of alcoholism to crime are very intimate, as the records of every prison will show—its connection with insanity is too well known to need mention. It is not surprising, therefore, that the attention of both civil and criminal courts is directed so often in those channels which lead to the determination of the responsibility of the victims of drink.

Divisions of Alcoholism.—It was Dr. Magnus Huss who first systematically studied the effects of alcohol upon the nervous system, and it was he who made the division of *acute* and *chronic* alcoholism. He as well as Thorneuf* considered three varieties of alcoholism :

1. Acute alcoholic intoxication, in which the effect is always immediately linked to the cause, and the duration of which is dependent upon the existence of the cause.

2. Subacute alcoholic intoxication supervening to the immediate action of the cause, usually melancholic in character.

3. Chronic alcoholic intoxication, which results in organic changes in the brain and nervous system, with accompanying insanity.

Of 350 lunatics treated in Charenton near Paris, when Dr. Thorneuf was an interne, the insanity in 102 cases was due to alcohol ; of these,

15	per cent. were of	delirium tremens,
6	" "	drunken mania.
1	" was of	congestive mania.
34	" were of	general paresis.
4	" "	folie circulaire.
2	" "	dementia.

and the remainder presented epileptiform convulsions and anomalous psychical symptoms.

Development of Alcoholism.—The early stages of alcoholism and the immediate pathological and physiological effects

**Annales Medico-Psychologique*, 1859, p. 365.

of alcohol are too familiar to need extended description. The physical aspect of the drunkard is also too well known. He presents the evidence of deficient motility which varies from muscular feebleness to tremor and actual paralysis. This loss of tone is shown in an unsteady gait, a jerkiness in the movements of his hands, and a lost sense of localization. He presents a tremor which is general, but more marked in the hands than elsewhere. The hand-grasp is feeble and he may drop any object he takes up. His facial muscles are flabby, and innervation is defective. Various defects in sensibility are presented, and anesthesia of the extremities exists, or there may be a well marked hemianesthesia in advanced cases associated with color blindness, and such ocular changes as atrophy of the optic nerve. Sensation is often delayed, and when a pin is inserted into the skin he does not detect the irritation for some time. His reflex excitability is often blunted, and the special reflexes are diminished. Digestion is poor and the bowels are relaxed, the food passing in a partially digested state. The urine is scanty and loaded with urates, or it may contain albumen in considerable quantities.

Mental State.—Intellectually the patient presents striking manifestations. There is a gradual alteration in habits and morals. Intellect is sometimes blunted, but as a rule there is a perverted condition which is shown in depression and actual melancholia, with delusions of persecution—and self-abnegation. Suicidal tendencies are common. Hallucinations are the rule, and they may be of the most extraordinary description. Patients hear voices and see horrid reptiles, as insects, toads, or vile creatures of every kind. These hallucinations are peculiar to alcoholism. The patient suffers from insomnia and is disturbed by hallucinations at night. Memory is enfeebled and there is finally a pitiable weakness of all the intellectual powers, amounting to dementia. A permanent weakened condition follows, perhaps one or more attacks of delirium tremens, and the transition stage is marked by early changes of temper and habits. The patient becomes "pusillanimous, distrustful and vindictive."

The hallucinations of the victim of acute alcoholism give him a sense of space, and he rushes ahead notwithstanding the obstacles which he encounters. He may walk along roof ledges or sit or stand in open windows without fear.

Actions as Influenced by Hallucinations.—The acts committed by a person who suffers from acute alcoholism are

of the strangest nature, and are unexpected and startling, and the explanations given by him are often curious. The patient is constantly under some fear or dread. It may be that he imagines that he has committed some horrible crime, and seeks the protection of the police, and it is estimated by Dagonét that, after the celebrated Troppmann murder, a great number of persons of dissipated habits in Paris surrendered themselves to the authorities.

Insane Drunkards.—Wynter speaks of a class of people—those who really need the protection of the law, and who are to all practical intents and purposes insane. They drink furiously and to great excess without any regard to the consequences. No obligation is too sacred for them to break, and when insanely drunk, no crime too horrible to commit.

"The most common and, as regards society and themselves, the most terrible of these minor offshoots of the insane diathesis, are the moral diseases, such as dipsomania, or drink madness. To the ordinary observer the dipsomaniac is nothing more than an utterly reckless person, who is determined to obtain drink, regardless of consequences. He is confounded with the ordinary drunkard, and his infirmity is looked upon as a simple vice. But, in reality, the two cases are utterly unlike. Whilst in the case of the ordinary toper drink is only the accompaniment of the festive board; in the dipsomaniac it is a secret vice. He will indeed avoid drinking in company, and assume the virtue of temperance all the time that he is madly looking for liquor; and when he cannot obtain it, will drink even 'shoe-blacking and turpentine, hair-wash, or any thing stimulating,' says Dr. Skae. There is one feature in the dipsomaniac which is very observable; he is invariably good tempered when not suffering from the physical depression which follows the indulgence of his desire. My own experience of cases under my charge, and which I have watched narrowly, leads me to the conclusion that the dipsomaniac is, without exception, a happy-go-lucky sort of person, with whom the world appears to go smoothly. The worst feature of the disease is the very small percentage of cures which are obtained. Among women there appears to be more chance than among men, as the irresistible desire, in some cases, leaves them after a certain period of life. But their case is rendered the more distressing, as it usually happens that the most refined natures, under such circumstances, are transformed into the lewdest and the most shameless of their sex."

Epileptiform Attacks.—Epileptiform attacks are often a grave feature of advanced alcoholism, and are always a serious phase of the disease. They are violent and occur usually in groups, one immediately after the other. Axenfeld refers to a condition of delirium following a more or less prolonged collapse, to which he has given the name "Larvated Epilepsy." The cases I have met with were characterized by a much more deep and protracted form of stupidity than is usually seen in non-alcoholic epilepsy, and the subsequent sleep stage was longer and more profound. Tongue-biting is common. The attacks may occur five or six times a day, and may be associated with, or followed by hallucinations, mild delirium, a temporary loss of memory, or a transient aphasia which lasts as a post-epileptic condition. The effect of repeated convulsive attacks upon the general nervous system is debasing, and there is a feebleness both of mind and body which is distressing; in a late stage there will be irregularity of the pupils, embarrassment of speech, and a condition suggestive of general paresis. Hereditary influence is a bad feature of this form of alcoholic disease.

Impulses in the Alcoholic Epileptic.—Epileptic attacks of alcoholic origin are quite apt to be preceded or followed, according to Dagonét, by very decided intellectual perversion, excitement and homicidal and suicidal tendencies, the result of delirium, and when the delusion has subsided the patient has no remembrance of his mental disturbance. According to this writer the impulses are transitory. He refers to the case of a man who had drunk a glass of absinthe in the day time and another in the evening, and at the moment of getting into bed was seized with a kind of delirious frenzy. He left his house, armed himself with a hatchet and went to his sister's house for the purpose of killing her, but when he arrived there he changed his mind, threw away the weapon and returned to his lodgings. He could not at first recall what had transpired while he was under the influence of the delirium. Eight days afterwards he again resorted to the absinthe, and dreamed that he had killed his brother, and he afterwards retained the most vivid impression of the dream. He subsequently developed all the symptoms of acute alcoholism—the spasmodic movements of the muscles of the face, trembling, cephalalgia, hallucinations, and numerous others. We should carefully weigh the possibility of masked or irregular attacks of an epileptiform character in all cases of homicide, even when

the crime has been committed subsequent to, or preceding the attack of delirium tremens.

In France the complication, according to Magnan, arises from inordinate indulgence in absinthe, but Dagonét holds a contrary opinion. It would appear that the absinthe has no specific influence, as in this country where very little absinthe is used, there is much epileptic alcoholism.

Loss of Memory in Alcoholism.—The relations of changes in memory are interesting. According to Dagonét this faculty remains confused for a long time, but clears little by little. The loss of memory occurs in two ways—as a consequence of alcoholic epilepsy, and as a result of acute alcoholism of great intensity.

The patients cannot furnish any explanation of their conduct. All they preserve is a confused memory. Forgetfulness is inseparable from the loss of consciousness which belongs to profound drunkenness. The drunkard is of course not in a state to comprehend what goes on about him, and cannot explain the motives which led him to commit acts he subsequently regretted.

Alcoholic Trance.—Many cases have been reported in which individuals in a peculiar trance state due to alcoholic excitement have committed outrageous acts which they are entirely unconscious of afterwards. In these instances there has been no history of profound intoxication, but often the quantity of alcohol has been inconsiderable. The mental state after recovery has been quite active and Dr. Mercier has expressed his astonishment in a case where the man had committed a purposeless act, while he was stupid and incoherent, but subsequently developed a most remarkable control over his faculties. In a discussion upon Motet's paper upon this subject read before the International Medical Congress Dr. Mercier* said :

"Alcoholic mania, although very transitory, might be very different from delirium tremens. Another case was that of a man who was crying out in the streets that people were taking his life by means of the telegraph wires. He was then in a state of acute mania, with delusions, and on the following morning he was completely well. In this case also the man, being a teetotaler, had suddenly taken a considerable dose of alcoholic liquor."

* *Journal of Mental Science*, Oct., 1881.

"Dr. Maudsley suggested whether, in these cases of moral transition, there might not have been a strong hereditary epileptic tendency. It occurred to him that in these cases of genuine acute mania of a transient kind, during which the person was unconscious, or would forget afterwards what he was doing, that kind of a mania might be a sudden outbreak in consequence, perhaps, of the patient's having drunk too much."

Dr. Crothers, a fertile writer upon alcoholic insanity, sums up his conclusions in regard to the trance state which may arise from inebriety and illustrates them by a case which I present:

"1. The trance state is a common symptom of inebriety, in which the patient is without consciousness and recollection of present events, and gives no general evidence of his real condition. This may last from a few moments to several days.

"2. This state is clear evidence of profound disturbance of the higher brain centers, and is of necessity followed by impaired judgment and lessened responsibility.

"3. This trance state will always be found associated with a particular neurotic condition, either induced by alcohol or existing before alcohol was used. In all chronic states of inebriety it will be found present in a greater or less degree. The first fact is supported by the evidence found in the history of every case of inebriety."

Trance following inebriety—Automatic Recovery.

"A railroad conductor, aged 45. Parents farmers, and healthy; no evidence of inherited disease. He grew up a strong, robust boy, and at twenty-two went on the railroad as baggage-master. Ten years later he married and was promoted to a conductor. He was, up to this time, temperate and regular in all his habits, using no spirits except beer at long intervals. A few months after his promotion to conductor, his train ran down an embankment and was wrecked. Many lives were lost, and he was greatly excited, fearing the censure of the company and public, remaining at the scene of the accident over twenty hours without rest or food. He then went home and drank spirits to profound intoxication, remaining in bed two days before he went to work again. From this time he began to use brandy, and occasionally was intoxicated at home at night. Two years after he complained of restlessness and inability to sleep at night; for this bitters were prescribed, which brought relief. His disposition began to change, and he became more

excitable and impatient of opposition. A year or more after he began to drink regularly when the work of the day was over, and by nine or ten in the evening was heavy and stupid from the effects of spirits. He was very exact and methodical in all his habits, drinking beer through the day, and never varying the routine of his life or work from any cause. When thirty-six years old, he complained of blanks of memory, or periods in which he could not remember, terminating suddenly, leaving him in some strange position with all the past a blank. His usual habit was to drink in the evening, either at home or at the club, come home always at ten o'clock, and retire, get up next morning at 4 A. M., and take his train a little later. These blanks would come on in the evening and break up at some point on the road the next day ; or they would last until late in the afternoon, on his return trip. He would then show much anxiety to know what had taken place in meantime, fearing he had made some mistake, and inquiring minutely of his wife and some intimate friends. These blanks increased, and were noted by his brother-in-law, a physician, as follows : He would come home at night heavy and stupid, not unconscious, apparently, but still and quiet ; sleep soundly until morning, get up at the regular hour, talk but little, take breakfast as usual, go out on his train, read the paper, attend to all the duties of his business in a quiet mechanical way. If any thing unusual happened he seemed to be more indifferent, and acted with judgment and caution. All at once he would seem to awaken, his manner would be nervous, and his eyes would indicate alarm, he would look over his change and tickets, and inquire of any one who was intimate with him as to what had taken place, having no idea of any thing from some time in the evening before. He would remember some question or topic of conversation that occurred in the company in the past evening, and be ready to go on with the conversation, only the circumstances had changed, and the interval was a blank. This state would alarm him, and he would drink less for a few weeks. He never was delirious, but complained of heaviness and desire for sleep. When he was sober he would be nervous and irritable, and then use spirits to steady his nerves.

" The treasurer of the road noted this condition, in his inability to make out the returns when his trip was over. He would count and recount his money, then give it up, saying his head ached and he could not get it correct ; the next day it would be satisfactorily settled. The blanks increased in length, and would last from the evening until the return from his daily trip

the next day, twenty hours or more. During this time he would not seem to be in any way different to the train men. Once, when an accident had occurred, he recovered his senses, and was unusually excited ; on other occasions he would have men put off the train, and pass through exciting scenes, yet have no memory of them, and be unable to make up a report, except from the assistance of a brakeman. He tried to break up the use of stimulants, but failed, saying he would become insane if he stopped ; then he diminished the quantity, but always came back to the usual amount, which was followed by more or less stupor at night. Both his wife and brother-in-law noted these trance states, and fully verified his statements of no recollection of events. He seemed to be more suspicious as he grew older, and urged that every thing be put in writing. On the road in this state, if he was asked for a favor he put it down on paper, and urged that others do the same to him. When not in this condition, he was quite careless about little things, but when he became exact and very particular his friends knew that he was not able to comprehend his state. He rarely drank except when at home, and whenever he felt that he had used more than he could bear, went quietly to bed ; always seeming to have an inner consciousness of his situation, seen in the caution which he displayed to keep from observation. For over three years these blanks continued, sometimes every week, then at longer intervals, but steadily increasing in duration, and becoming more prominent in the heavy stupid air and manner of doing business. He resigned and spent a year on the farm, using less alcohol and recovering rapidly. He is now in business, and has had no blanks for two years, but at times after he has drank two or more glasses of beer his memory is confused for an hour or more."

Changes in Character.—The effects of alcohol are rarely the same in different individuals, and no rule will work universally. Some men lose their business capacity, while others become pugnacious or irritable, and at the same time are energetic and show little sign of weakness. Some drinkers succumb almost immediately to small quantities of stimulant, while others seem to be little affected.

Heredity.—The abnormal craze for drink is often the direct result of the insanity or intemperance of ancestors. Even when carefully environed, the trouble breaks out, and several members of the same family are apt to be affected. In such families the children of decent parents may reproduce the

behavior of maternal or paternal grandfathers. Vicious instincts and alcoholism go hand in hand; one brother may become a thief, who does not drink—another may commit no greater crime than those of a light sort arising from his drunkenness.

Dr. Bucknill considers that insanity may directly follow drink; or that it may arise from some other influence such as mental strain, which causes drink-craving. Drink concurring and continuing with other causes and producing a progressive effect, the end of which is the *evolution* of madness.

Fixed Ideas.—Fixed ideas are all of a horrible nature. The victim of alcoholism firmly believes that he is the object of attack of a well organized conspiracy—that he is to be poisoned or killed. He is often impelled in consequence to attempt homicide or suicide. These delusions may be connected with maniacal excitement. Sometimes they may be of an expanded character. The extravagant ideas of the patient suggest general paresis very strongly, and in fact this disease may and often is a direct outgrowth of the alcoholic state. Irregular forms of alcoholism are quite likely to be called general paresis, but there is a difference.

Delirium Tremens and Responsibility.—Delirium Tremens has been advanced as a defense very often in murder cases, and in the case of the Queen vs. Burns Baron Bramwell charged the jury to acquit if they believed the prisoner to be suffering from a delusion, which if true would have justified him in the act. If through drink his mind had in their opinion been substantially impaired, they were to acquit him which they did.

The distinction between delirium tremens and temporary madness induced by intoxication, is laid down in the United States vs. Drew, 5 Mason, 28 and (in England) in John Burroughs' case, 1 Lewin, C. C., 75. In the latter case, Holroyd, J., said: "Drunkenness is not insanity, nor does it answer to what is termed an unsound mind, unless the derangement which it causes becomes fixed and continued by the drunkenness being habitual, and thereby rendering the party incapable of distinguishing between right and wrong."

Diagnosis between Alcoholism and General Paralysis.—The following table, prepared by Thorneuf, sums up the diagnostic points.

Alcoholic Insanity complicated with paralysis,	*General paralysis.*
Headache.	Generally no headache.
Active hallucinations affecting all the senses, disordered vision (illusions).	Enfeeblement of the understanding, rarely hallucinations.
Delirious conceptions depending upon hallucinations; ideas of persecution, tendency to suicide, evil instincts, consciousness of degradation.	Ideas of grandeur and contentment.
Embarrassed speech depending somewhat upon fear, upon startings of the muscles of the face and especially upon tremulousness of the tongue.	Embarrassed speech depending upon feebleness of the conceptions and paralysis of the muscles of the face.
Feebleness little marked of the inferior members; equal on both sides.	Feebleness of the inferior members, more marked generally upon one side than the other.
Trembling of the hands and the arms more marked in the morning; formications, cramps and startings of the tendons of the fore-arm.	Nothing appreciable in the superior limbs, sometimes default of co-ordination.
Pupils nearly always dilated.	Pupils often unequal, often contracted.
Anesthesia of the extremities of the limbs extending generally in the superior limbs to the elbow, and in the inferior to the knee.	Sensibility normal, or obtuse over the whole surface.
Sleep disturbed with dreams, sometimes sleeplessness.	Sleep generally normal.
Diminution of appetite, acid eructations, vomiting of mucus in the morning.	Appetite augmented.
Dimunition of the generative functions, frigidity.	Augmentation of the generative functions.
Readily cured or modified.	Progress of the disease ordinarily rapid, always fatal.
Occasional supervention of *delirium tremens*.	Tendency to congestions, and to epileptiform attacks.

Responsibility and Alcoholism.—Mere drunkenness does not bring with it immunity from punishment. The law is not so lenient. When the drunkenness of the criminal leads him to commit an act as the result of an illusion, hallucination or delusion, the matter is different. It must be shown that he actually suffers from *disease* of the mind. Under this head we find some cases of chronic alcoholism, of dipsomania and of acute alcoholism with delusions and hallucinations. The

delusion or hallucination must moreover exist, or in some way be connected with the act. If the person defends himself from imaginary enemies he will be clearly irresponsible.

Taylor says in this connection: "If the drunkenness has produced a diseased state of the mind, then a criminal act perpetrated by the person might admit of exculpation either on the ground of insanity or of the want of sane consciousness at the time of the act; but the difficulty is to prove in such cases the existence of actual disease to a sufficient degree to render the person irresponsible in a legal sense. Where it is a question whether the accused was actuated by malice or not, a jury may under certain circumstances be required to take the fact of drunkenness into their consideration, and this may have some influence upon their conduct."

It may be held that the crime committed by a voluntary drunkard is an aggravated one, but the fact that the man was drunk at the time the crime was committed should be considered in relation to intention or malice. Browne refers to the case of King *vs.* Thomas, in which it was decided that drunkenness is no excuse for any crime a man may commit; still where provocation by a blow has been given to a person who kills another with a weapon which he happens to have in his hand, the drunkenness of the prisoner may be considered on the question whether he was excited by passion or actuated by malice; and it was further held that it may be considered on the question whether expressions used by the prisoner manifested a deliberate purpose, or were merely the idle expressions of a drunken man.

Le Grand du Saulle on Responsibility.—Le Grand du Saulle says of the responsibility of drunkards: "With respect to my personal opinions upon drunkenness, they are as follows: The inveterate abuse of alcoholic liquors should continue almost entirely without influence over responsibility, until there is manifested and confirmed and persistent mania. Habitual drunkenness ought neither to augment nor extenuate the consequences of the act committed, but it may to a considerable extent diminish or altogether do away with the suspicion that the immediate drunkenness has been contracted for a culpable end. It is with difficulty one can understand that the habit of getting drunk should become, on the part of magistrates, an object of gracious consideration when their office is to repress scandal and to punish immorality."

CASE LI.—MURDER—PLEA OF INTOXICATION IN MITIGATION —PROOF OF PLOT MADE WHILE SOBER—CONVICTION.

Hamlin *vs.* The State, } 48 Conn. Reports, 92.

Hamlin was convicted of murder in the first degree. He and one Allen made an attempt to escape from the State prison, and in the attempt killed a watchman named Shipman. He then petitioned for a new trial on the ground of newly discovered evidence of his intoxication at the time of the murder. It appears that they had for some time previous made preparations for the escape by bribing one of the watchmen, that they had afterwards decided to escape by attacking the guard and making a bold dash, and that they had waited for two hours for an opportunity to make the attack. It is claimed that while thus waiting the prisoner drank some liquor and became intoxicated. In refusing the petition the Supreme Court of Errors held, that conceding that Hamlin was intoxicated when the attack was made, he had previously participated in all the preparations therefor even to the extent of taking human life, they having armed themselves; that in view of these facts the attack and its consequences were premeditated and the intoxication at the time of the murder could be of no avail as a mitigating circumstance.

CASE LII.—MURDER—DEFENSE OF ALCOHOLISM—CONVICTION.

Henry A. Schlencker *vs.* State, } 9 Nebraska Reports, 241.

The prisoner on Oct. 10, 1878, while intoxicated, went to a house of ill-fame to see one Florence Booth whom he requested to lie down with him which she refused to do. A quarrel then ensued and he shot and killed her and then shot himself, but subsequently recovered. He was convicted of murder in the first degree and sentenced to be hung, but obtained a reprieve and was granted a re-hearing. The defense set up was insanity superinduced by alcoholism. Several witnesses testified that on the day of the murder and for some time previous the prisoner "acted strangely; was drinking; was not in his right mind; had eaten nothing; was excited; walked hastily; acted queer; tried to run against us; acted funnier than he

ever did before ; looked fierce ; had fits ; looked dreamy, as if there was something on his mind, etc." M. C. Keith a practicing physician testified that he examined prisoner after the shooting ; " his blood was thin, red, arterial, and smelt of alcohol ; " he believed from his condition that he had been drinking constantly for from three to six months ; believed him to be, but would not swear that he was, suffering with chronic dipsomania or oinomania, which would induce him at the time of the frenzy to kill even his best friend ; his eyes were protuberant ; believed from his appearance he had just passed through a paroxysm of madness ; a person in this paroxysm knows nothing ; does not realize his condition ; has a desire to destroy life." The State produced a number of witnesses who testified with regard to prisoner's actions before and on day of murder. He seemed perfectly sane ; walked straight ; his face looked natural ; appeared to be all right ; saw him on witness stand on Sep. 30 ; he was a little excited then ; nothing peculiar in his actions ; should say he was sane from his general appearance.

On appeal to the Supreme Court the conviction was affirmed.

CASE LIII.—WILLFUL MURDER, DEFENSE INSANITY. — PRISONER INTOXICATED AT TIMES. — FEIGNED INSANITY.— CONVICTION.

State
vs.
Edwin C. Hayden, } 51 Vermont R. 296.

Prisoner who had been separated from his wife by reason of his intemperate habits, on August 30, 1876 called upon his wife who was living at the Derby Line Hotel in Derby Line with her sister and sister's husband for the purpose of effecting a reconciliation. He was somewhat intoxicated and received no encouragement. The next morning, having announced his intention to shoot his wife, he again called to see her, but, being very intoxicated, was refused admission to her rooms, and went away. He soon returned, however, and endeavored to force his way into his wife's room but was resisted by her brother-in-law, whom he shot and then forced the door of the room and shot his wife. After his arrest he said he hoped she would die and he was ready to be hung. This evidence was not controverted by the prisoner, but a plea of insanity was put in. It was claimed that when he was under the influence

of liquor he was subject to emotional insanity. It was shown that several of prisoner's ancestors had been insane; that while in jail his conduct was strange and unaccountable and that he was sick and prostrated. (On behalf of the state a doctor who had examined him in a jail and to whom prisoner had explained his symptoms stated that he believed prisoner was shamming). It was also claimed that the manner of the shooting was proof of his insanity. Three witnesses testified that they knew prisoner, had seen him sober, had seen him excited, and also intoxicated, but believed him to be sane, but no further evidence was produced except the opinions of experts, based on the facts, which were to the effect that prisoner was not insane.

Prisoner was convicted and on appeal to the Supreme Court the conviction was affirmed.

A recent Nebraska case* in which intoxication as a defense was urged is that of the State of Nebraska *vs.* Schleucher in which the prisoner murdered a woman while intoxicated. The judge held that "settled insanity, produced by intoxication, affects the responsibility the same way as insanity produced by any other cause; but insanity immediately produced by intoxication does not destroy responsibility when the patient when sane and responsible made himself voluntarily intoxicated."

In the same case it was held that the fact that the prisoner was in a drunken state when he committed the homicide does not in itself render the act of shooting the deceased any the less criminal nor is it available as an excuse.

As an illustration of insanity directly due to drink when the question of responsibility is doubtful, I may quote the following history:

"Man, aged 37, single, laborer, intemperate, had suffered from several attacks of acute mania, arising from the use of liquor, and occurring after a protracted debauch. Was first admitted to Utica Asylum two years previously and was then violent, destructive, sleepless and acutely maniacal, and had committed violence by knocking a woman on the head with a club. He soon became quiet and returned home, where he continued well till present attack. He drank to excess during the interval, and three weeks before second admission became maniacal and threatened to kill various persons. He set fire to the house of his brother-in-law, whose family was asleep

* Referred to in *Boston Med. & Surg. Journal*, Jan. 29, 1880.

below and was aroused by the noise of the fire. His sister attempted to go up the stairs, when she was opposed by the patient who struck at her with an ax. This fortunately glanced off without inflicting serious injury He was arrested, securely restrained and brought to the Asylum. He recovered after six months. Has since had another attack, and is now in the Asylum."

The neurotic criminal often "nerves himself up" and seeks in alchohol an agent not only to steady him for the performance of his crime, but to obscure his conscience. Parrish, who has had a large experience in such cases, presents in a recent work* two or three cases, an important example being the following:

"Aged 29, clerk. Drinks to excess occasionally. Latterly the occasions have been so frequent, that he has lost his situation. Upon further acquaintance with this youth I found him honorable and honest, when sober, an excellent clerk, obliging, and given to no other habitual vice, than excessive smoking. He is sensitive, and has recently become suspicious to a degree that makes intercourse and conversation with him a very delicate matter. At times he was overtaken with an impulse to commit an act that was in violation of his conscience and moral sense, but which seemed to be irresistible. The very conflict with himself and his temptation aggravated his nervousness, and he became willful, obstinate, profane, and restless to a degree that was irrepressible. In this stage of extreme irritability, he would resort to whisky in great moderation. Unlike the dipsomaniac, who drinks without limit, and without thought, he drank with great caution, taking a little, with short intervals between. As the circulation began to create a glow throughout his whole capillary system and his extreme nervousness began to yield to a state of comparative calm, the period of deliberation was reached, and, keeping himself at this level by repeated draughts of liquor, at suitable intervals, he was enabled to plan and execute. His offense was always the same, and after it was done he suffered remorse and sorrow, and till the next overpowering impulse posessed him he was prudent, sober and correct. This young man afterwards settled in business and became a useful citizen. His friends consider him a "reformed drunkard," and he is willing to accept the title. He is however a reformed criminal, if the propensity to crime is in subjection; but he was never an inebriate in its actual physiological sense."

Alcoholic Inebriety.—p. 26 Phila. 1883.

Another case is that of a man, age 41. An agent for a large mercantile firm, who, with a clear head and steady hand, executed a forgery, and then deliberately got drunk to partially obscure from his mind thoughts of the deed, but more especially to furnish his friends with a plea for committing him to an inebriate asylum, the officers of which were unconsciously instrumental, for the time, in aiding a criminal to escape the just sentence of the law. I am not aware that this man was ever intoxicated afterwards, while previous to this time he bore a reputation for sobriety. He was not an inebriate but a criminal, and yet the fact of being sheltered for a short time within the walls of a Sanitarium gave him an opportunity to pass, on his discharge, for a reclaimed victim of the bowl, which he preferred to the shame of being a forger.

"Another case that came under my observation, but not under my care," says Parish, "was a convict in a State Penitentiary for the third time, for manslaughter. Notwithstanding his homicidal tendency, which seemed to be inherited, he acknowledged himself a coward, and it was always with much fear that the impulse to kill was associated. Instead of the daring and even rashness of some homicides, he trembled with terror as the impulse to destroy life seized and possessed him. The conflict between the impulse and the timidity and dread, which were almost simultaneous in their approach, made him nervous, irritable and angry. Under these conditions, he resorted to the liquor in such carefully graduated quantities as he imagined would secure care and deliberation in the prosecution of his purpose. His purpose was to select a victim whom he could manage with ease, always keeping himself in the attitude of self-defense, that he might evade the extreme penalty of the law for murder. He could, while his own anger and irritability were under control, excite his antagonist to threats or attempted assault, during which period he would calmly and surely inflict the fatal wound, under the pretense of saving his own life. This sort of proceeding had been practiced with success three different times, on which account he had spent most of his adult life in prison, and before his term expires he will probably die in his cell. He described to me with evident clearness, and certainly with considerable self-satisfaction, the details of his proceedings, and manifested no evidence of remorse on account of his guilt. The cause of his crime on the prison docket was "intemperance," and he was willing to accept this record as true, because it was written, for he did not appreciate the enormity of his crime nor the guilt of a criminal.

He should not have been so registered He is not a drunkard but a murderer; the criminal intent was in his mind; the objects of his assaults were selected, and plans laid to decoy and irritate them before he drank the whisky to aid his brutal instinct and nerve him for the fulfillment of his diabolical purpose. He represents a class, and I doubt not, if a careful analysis was made of the character and habits of convicts now in confinement, the discovery would be made, that many whose crime-cause is stated to be intemperance, would be found to be like the one just stated—temporary drunkards for a criminal purpose."

Alcoholism and Civil Action.—In civil cases the law is not so stringent as in criminal. Habitual drunkards are deprived of their rights by commissions, and the individual is not liable for contracts made by him.

"Habitual Drunkards."—It is a difficult matter to determine what constitutes "habitual drunkenness" In the case of Blancy *vs.* Blancy (126 Mass. Repts., 205), a decision was rendered in an action for divorce on the ground of habitual drunkenness It was proved: that defendant for 12 or 15 years past became grossly intoxicated at least three times a year and remained in that condition from 7 to 10 days each time that when these spells came he was sent to an inebriate asylum where he remained until they passed: that between the spells he would drink nothing but that any excitement would make him drink.

Held, on appeal to the Supreme Court that this was sufficient proof of habitual drunkenness.

In the case of Wheeler *vs.* Wheeler (53 Iowa, 511), a divorce was granted the plaintiff who was the victim of the husband's violence during his drunken excesses, although at other times he was sober and was able to conduct his business.

Plaintiff and defendant were married in 1859. Previous to that time defendant was addicted to liquor and was frequently drunk. After his marriage he became an habitual drunkard and his wife sued for a divorce on that ground and also because of inhuman treatment. The divorce was granted.

Although he was always sober during business hours, he was habitually drunk at other times, and when in that condition abused his wife, calling her vile names and openly charging her with unchastity.

On appeal the Supreme Court affirmed the decree of divorce.

Commitment of Drunkards.—The commitment of an inebriate may often lead to very disagreeable results—the medical men or the friends being sometimes sued by the person imprisoned. The case of Jason L. Blodgett reported by Dr. Fisher* is so interesting that I may be pardoned for referring to it rather extensively, using the doctor's language.

"A suit was brought two years ago in the Massachusetts Supreme Court by Jason L. Blodgett against his divorced wife, Major Jones, now on the Board of Police Commissioners of Boston, and Drs. Fisher and Youngman, for a conspiracy to imprison him in the Taunton Lunatic Hospital on the false charge of insanity; also for assault and battery in causing his arrest; and for taking his property, ruining his business, and causing great damage to his reputation and feelings; for all of which damages to the extent of $15.000 were claimed. His legal adviser at first was William H. Towne, who afterwards called to his assistance Edward Avery. The defendants were represented by Edward P. Brown. At the first trial the plaintiff's petition was dismissed for informality and illegal contents. Major Jones was excused, as having had nothing to do with the particular commitment complained of, the plaintiff having been sent to Taunton twice; and Mrs. Blodgett, having been his wife at the time of the alleged offense, could not be proceeded against. This left the two physicians standing alone; and, after six months, the case was called again, unexpectedly, at the close of the summer vacation, when police officers, who were important witnesses, were absent. The wife, whose testimony was almost absolutely essential to the defense, had hidden herself from her divorced husband in the far West, and could not be compelled to attend or obtained as a witness without great expense. The plaintiff told a story, based on his confused recollection of events, and deliberately false in some parts, which was contradicted by the defendants, who offered to put in as the basis of their certificate information received upon 'due inquiry,' as well as the result of personal examination. This hearsay testimony, though required by law as part of the foundation of the certificate, was not admitted in its support at this time, and the wife being absent, essential facts were kept out of evidence. The rulings of Judge Endicott were in every other way favorable to the defendants. The jury disagreed, as the foreman afterwards stated to Major Jones, by permission of the court,—nine for the defendants

* Boston *Med. & Surg. Journal*," June 6, 1881.

and three for the plaintiff, on the question of 'lack of due inquiry' only. No suspicion of a conspiracy was entertained by any juryman.

"The case was again called last spring, the wife still being absent. The plaintiff, with one or two unimportant exceptions, was his own witness, and made the same or similar false statements as before, showing clearly on the stand to medical observation the unreliable and irresponsible nature of his mental operations. The case was classified as dipsomania on all the certificates offered, of which there were three. The following is a brief sketch of the plaintiff's history :—

"At the time of the trial he was a man about forty years of age, of evidently neurotic constitution, impulsive, excitable, with a loose way of expressing himself, said to have been characteristic of him from youth. One witness testified that he had always been given to telling untruthful and inconsistent stories. He was reported to have had an aunt who was insane. His father was a clergyman, and both his parents died in his early youth of consumption, leaving him in charge of his relatives. He was a bad and irregular scholar, though quick-witted enough for mischief. At the age of puberty he showed a proneness to premature vicious conduct of various kinds. He is said to have begun to drink by sprees at the age of fifteen years. He had some good traits and impulses, but was early the slave of his appetites, and was cursed with a craving for drink. His sister says he was a good brother when sober, but a 'perfect devil' when drunk.

"He was in frequent trouble on account of his scrapes, both in the country and in Boston, until the war broke out, when he enlisted. Having previously lost the sight of one eye, it was still further injured by a thorn, and was enucleated. He was then put on an army freight train as conductor or brakeman, and continued to serve until the close of the war. After the war he was employed on railroads at the West, leading a life of active dissipation, according to his own admission to a witness. In 1875 he came to Boston, claiming to have reformed, and that he was the possessor of a large sum of money. In this belief a widow of the former proprietor of certain Turkish baths in Boston—herself being the owner at that time—married him. His fortune proved mythical, and his wife was obliged to pay for his wedding suit and for the wedding journey ; she gave him a gold watch, and supported him ever afterwards, except for the small value of his services in the baths. He obtained control of all her property, and in a very short time developed a

tendency to drink by sprees, in which he was ugly. violent, and dangerous, threatening his wife in particular. He was seldom seen drunk in the ordinary way, but was exalted and maniacal, acting more or less automatically, and failing to remember his conduct and conversation afterwards. It is but charitable to suppose that this accounted for his wholesale denial of numerous facts testified to by a score of witnesses on the stand. In a year or two he had spent all his wife's property and destroyed her business by his drunken conduct.

"My attention was first called to him October 12, 1875, by Dr. A. N. Blodgett, his wife's physician, but not related to either party. Dr. Blodgett, being in attendance on the wife, found the husband in a state of delirium from drink, in which hallucinations of snakes in his bed were prominent. He thought he saw the devil in the looking-glass; threatened to kill his wife; threw furniture violently about the room; and did not recognize Dr. Blodgett, but violently assaulted him several times. Policemen were called, and he was taken to the tombs. The next morning application was made by Dr. Blodgett to the Board of Directors for Public Institutions for his commitment to Taunton as insane. Having learned his previous history, I agreed that he might be a dipsomaniac, but, the present attack resembling in some of its features delirium tremens, advised that he should be sent to Deer Island. He did not have a perfect attack of that disease, and was discharged in two or three days, apparently rational.

"He was again arrested January 31, 1876, for violent conduct while drunk, and released on promise of good behavior, but was re-arrested the same day, fined three dollars and costs for being drunk, ten dollars and costs for assault on a female employed at the baths, and was bound over for six months to keep the peace. Was sent to jail, and Major Jones, as bail commissioner, signed the bond on which he was released. June 24, 1876, was arrested again, but let off on promise of good behavior. Again on November 8, 1876, he was arrested as insane. Complaint having previously been made to the board of directors, I was sent with Dr. Youngman to interview Blodgett. Learned that he had been very violent at the baths, smashing up furniture and frightening bathers and employes. Found him at home, an officer bringing him up from the cellar, where he had retreated, having an ax in his hand. His wife had fled from the house, and the other inmates were locked in their rooms. He was in a very ugly, sullen mood,

having been drinking heavily. He denied, as was his custom, ever drinking to excess or using violence to any one. He had recently had a spasm of religious interest ; went into a prayer-meeting at the Young Men's Christian Association, and offered any brother twenty-five dollars to convert him. A member went home and prayed with him, but was turned out by Blodgett because he 'didn't pray worth a damned cent'! No sign of delirium tremens was present at this time, and it was determined to send him to Taunton as a dipsomaniac, with a view to a sufficiently long detention for his improvement or cure. He made no objection and asked for no hearing, thus acquiescing in his commitment.

"Having remained at Taunton a few weeks, he was discharged on application of his counsel, Mr. Towne, and was sober and well behaved for a considerable period after it. He admitted, in an interview with Major Jones, his irresistible disposition to drink, and that he presumed the allegations of violence were true, but that he did not remember what occurred at certain periods of his drinking spells. He had also consulted a relative in reference to some cure for his entire loss of self-control in reference to drink. He joined the church of which his wife was a member, and behaved well till August, 1877. From August to December he had three sprees, in which his conduct was erratic and violent. For instance, he would rush down Washington Street in the evening with a roll of bills in his hand, flourishing them about, and followed by a crowd of men and boys. He would buy a pie, order a hack, and send the pie home alone in the hack. On several occasions he used vulgar, profane, and threatening language to ladies at his wife's boarding-house. December 10, 1877, complaint having been made to the board of directors, he was examined at his boarding-house by Dr. Youngman and myself. We found him in bed, nervous and confused, as if from a prolonged debauch. I talked with him half an hour, explained to him my theory of his case, told him I thought nothing but prolonged detention would do him any good ; that as he had improved after a few weeks in Taunton a year would do him still more good. He denied drinking more than was good for him, but said he would stop at once if we would not certify in his case. I told him if he was arrested again for violent conduct I should certify. This interview, he testified, was only a few minutes long, and he could remember but one thing that was said. Two days after he was arrested at the baths for furious conduct towards his wife and other ladies, and for trying to kick over a hot stove.

He was sent to Taunton December 12, 1877, and asked for no hearing at this time.

"Remaining in Taunton about three months and a half, he was discharged March 26th, and rearrested for throwing a bottle at some one at the baths March 30th, four days after. The next morning he showed very little effect from liquor when seen at the tombs, the period of indulgence having been brief. He demanded a hearing at once, and a certificate *pro forma* having been signed to bring his case before Judge McKim, he was released on promising good behavior. In April a libel for divorce was filed by his wife, alleging brutal and violent conduct, with gross and frequent intoxication. Blodgett appeared in the anteroom of the supreme court in his usual peculiar condition, insulted several ladies there with obscene talk, undertook to conduct his own defense, and harangued the court in such strange and familiar language that the judge told him he must be either drunk or crazy, and granted the divorce. His wife then left him for the West, in a penniless condition, and he soon found a lawyer willing to take his suit against the alleged conspirators. This idea of a conspiracy was, I think, in part, a vague delusion growing out of imaginary wrongs, and in part a foolish attempt to rehabilitate his fortunes and revenge himself at the same time by a suit against his assumed enemies. A few weeks before the final trial he was arrested for drunkenness in Waltham, and boasted, in his loose way, of the immense business he was doing, and the money he was going to make out of the doctors.

"At the last trial, before Judge Lord, the preceding facts and many others of similar import were proven. Twenty policemen testified to Blodgett's habits of drunkenness, eccentricity, and to his violent actions. They all agreed that he was different from ordinary drunkards in his talk and conduct, and was regarded as crazy and dangerous when in liquor. This opinion was sustained by many sober witnesses who knew him well, and by his own confessions to Major Jones, as well as his appearance on the stand. He there denied in a wholesale way all excessive drinking and all acts of violence, only to be contradicted by many reliable witnesses. He might, perhaps, truly have said that he remembered no acts of violence, as I have no doubt his conduct was automatic. Judge Lord allowed the facts obtained by 'due inquiry' to be testified to in full, the other side failing to object.

"A number of experts were called by the defense Drs. Walker, Brown, Gage, Russell, Denny, Jelly, Folsom, Channing, Day,

Blodgett, Fisher and Youngman, gave their definitions of dipsomania and testified to the propriety of treating it in hospitals for the insane, in the absence of other special institutions. These gentlemen substantially agreed in affirming the existence of such a disease and in the necessity of so treating it.

"The plaintiff called on his behalf Drs. Henry G. Clark, J. P. Treadwell, and Horace Chase. Dr. Clark thought a dipsomaniac must be a person who on drinking a single glass must inevitably go on to complete intoxication. He thought Blodgett did not fall within this definition. He was obliged to admit, however, that he had recently said that Blodgett was 'crazy drunk' and properly sent to Taunton, but was kept too long; and that he had certified within three months in the case of a dangerous dipsomaniac committed to Danvers. Dr. Treadwell gave his views at length, and thought the part of the testimony he had heard did not warrant calling Blodgett a dipsomaniac. Dr. Chase's testimony I did not hear.

"Judge Lord's charge to the jury was satisfactory in every way to the defense, and was an admirable statement of the rights and liabilities of physicians certifying in cases of insanity. It deserves reproduction as a whole, but I will give only a very brief abstract of it. Judge Endicott had said in substance at the previous trial that it was evident from the testimony that there was such a disease as dipsomania; that the line between it and ordinary vicious drinking was a narrow one, which only qualified medical men could safely draw; and that a lunatic hospital was a proper place for its treatment. Judge Lord, however, told the jury to reject the technicalities of the doctors, and charged that if mental unsoundness of any kind existed it was an end of the case; that if physicians honestly believed the party to be insane, although they may have been misled or mistaken, they were not responsible. They were obliged by law to make "due inquiry" of the parties most likely to possess the facts relating to insanity, and nearest by ties of relationship or affection to the patient; but they could not take sworn evidence in the case, and must act according to their best judgment upon the facts obtainable. Their certificate was not required by law to be under oath, and was merely the necessary means of bringing the case into the jurisdiction of the proper court, after which they were not responsible for the action of the court, unless it could be shown that they willfully gave false testimony, or grossly and criminally neglected to inquire into the facts of the case. In the words of the court, 'If capable physicians should act recklessly, disregarding the rights of the

party, and send him off to a hospital without any evidence at all, then they would be responsible. But if, on the other hand, they made the inquiry which the circumstances of the particular case called for, then although subsequent events may show that that inquiry might have been pursued further, if they acted in good faith, that is their protection.' The jury returned a verdict for the defendants."

So far as the making of contracts is concerned the law does not interfere when there is rational consent, but when the drunkard is in such a condition when he makes a contract having no intelligent idea of what he is doing, such a contract entered into by him cannot be considered valid or binding. Marriages made when the individual is utterly unconscious of what he is doing, are of course null and void.

Testamentary Capacity.—The will of a confirmed drunkard will stand in law, provided the person who made it is not in a condition to be so unreasonable and irrational as to be unable to exercise any thing like healthy judgment. A man may be a hard drinker, and make the will after a debauch, but unless its character is so absurd as to betray mental unsoundness he cannot be reasonably deemed irresponsible. In a recent case in which I appeared, the testator was a man of bad habits, who drank immoderately and steadily. Evidence was produced to prove that he had done all manner of foolish things before and after the will was made, but no evidence was brought forward to show that at the time the paper was signed the testator was in any condition to prevent him from fully knowing the nature of what he was doing.

We are to consider in such cases the degree of the drunkenness, the habits and physical condition of the person.

The will of a man of bad habits is often contested, it being asserted that his alcoholic dissipation renders him incompetent. But though an individual may be outrageous in his ordinary conduct, a great deal more is required than these exhibitions to indicate that he has not the power of mind to make a will. Such a case fell under my notice two or three years ago, the testator being a man of middle age, who had for months been addicted to drinking, although in a periodical way. A vague history of bad temper, broken sleep and many extravagant acts, none of which, however, were necessarily manifestations of insanity, were testified to by the contestants, and one physician gravely asserted that a proof of his mental perversion consisted in the irritability of

his throat during the time he was making medicated applications to the same. He was alleged to have declared that "he could not retain any thing upon his stomach," that "he resorted to memoranda that he should not neglect his engagements," that "he abused the doctor who had treated his wife during her last illness, and threatened him with violence," that "he complained of being homesick;" and various persons who had seen little of the testator testified to having observed him drunk on several occasions; that "he was extravagant, and bought large quantities of oranges," which, however, were for his sick wife; and that he "talked wildly about his business." It appeared, on the other hand, that he was able to attend to his affairs for some time before his death which was not due to alcoholism; that when he made his will it was at a time between two of his sprees, and that there was no want of sagacity or any irregularity shown in the disposition of his property. In this case, as in many others, the popular ideas of insanity are apt to be thoroughly ventilated, and it is strange that this kind of testimony should receive any attention whatever in courts of law. It is a very easy matter to exaggerate the disorderly behavior of an individual who is in no sense insane. The "excitement" alluded to by interested witnesses is probably nothing more than a moderate emotional exhilaration, and the business schemes which attract the wonderment of those who wish the will broken, ordinarily display a mind of unusual shrewdness. The speculations nearly always turn out well, and the despondency does not rise above the dignity of an ordinary attack of the blues. In the above case the husband's devotion to his dying wife seemed to have astonished those persons who appeared upon the side of the contestants; and this peculiar behavior, which was regarded by them as evidence of mental unsoundness, consisted in such kindly offices as removing her to the window, so that she might get the fresh air, and bringing her fruit; and though his exuberation of affection might have been that which is so often intensified by occasional libations, it was in this case nothing unusual. It did not appear that there was any thing in the character of the will that indicated insanity; that it was legally witnessed, and made at the time when the individual was perfectly sober, and was therefore very properly admitted to probate.

In another case of a different kind, the patient had for several years indulged in large quantities of alcohol, and it was common for him to shut himself up in the room with a box of champagne and not leave until he had recovered from the

effects of the intoxication produced by the dozen bottles he finished one after the other in rapid succession. This man for several years before his death drank all kinds of liquors to excess, squandered his money, giving large amounts to persons who had little or no claim upon him, and betrayed a change in character which was remarkable when contrasted with the regularity and sobriety of previous years. Within a short time before his death he manifested symptoms of the inevitable diseases which are due to excesses of this kind, and he finally succumbed to cirrhosis and died comatose. When supported in bed and surrounded by those to whom he left his money, he made a will and died a few hours afterwards. This will was very properly contested by his brother, and it was admitted to probate by the Surrogate, though the decision of the latter was subsequently reversed. It is quite likely here that the man's mental condition was one which even some time before his demise would prevent him from properly recognizing the objects of his bounty, and render him an easy prey to designing persons; but a will made under more outrageous circumstances it is difficult to conceive of, for he was literally in a condition of *extremis* when his name was signed to the document.

CASE LIV.—ALCOHOLIC INSANITY WITH GENERAL DELUSIONS NOT AFFECTING TESTAMENTARY CAPACITY.

Lee *vs.* Scudder, } 31 N. J. Equity Reports, 633.

Betsy Marsh died April 7, 1876, aged 65 years. She was eccentric in dress and coarse in language. She died after a short illness, of a disease of the brain, not determined, which gave rise to frequent delusions. These delusions only appeared occasionally. On the 3d of April, 1876, she executed her will, and stated in answer to a question that she knew what she was doing, and later in the same day sent for a Dr. Kinch, who had drawn her will, to make some alterations in it. These alterations were never made, for the next day she was found intoxicated in the woods, and from that time she was very ill until she suddenly died on the 7th of April. It was testified that deceased was of sound mind at the time the will was executed; that her delusions were only intermittent, resulting from her disease, and that they consisted of presentiments of death, and

did not relate to any person who might have been an object of her bounty.

The will was admitted in the Union County Orphans Court, and on appeal to the Prerogative Court this action was affirmed.

In chronic alcoholism with organic brain diseases the question of responsibility naturally arises. In most cases of advanced structural disease the character of the testator undergoes a series of changes which render him weak, vacillating, childish and without vigorous memory. At such times it is extremely probable that the patient is a prey to designing relatives, and suffers enfeeblement of the will.

Care should be taken not to confuse the mental impairment of old age or eccentricity with the peculiarities of disposition and habits resulting from chronic alcoholism.

Alcoholism and Life Insurance.—Litigations frequently arise between life insurance companies and the heirs of deceased persons who have either drunk to excess or who have died from alcoholism. In most of the policies, there is a clause which explicitly states that excessive indulgence in alcohol or any drug that tends to materially shorten life must vitiate the contract. In some instances the patient withholds his bad habits from the company, in others the formation of the bad habit arises sometimes after the application for the policy; and again the question of heredity arises, and the patient makes his declaration entirely ignorant of any family taint or predisposition to drink. It sometimes happens that policies are transferred, and the individual subsequently drinks himself to death—thus inflicting a loss upon the assignee, and perhaps giving rise to a suit brought against his executors. The question of alcoholic indulgence in this connection gives rise to a number of possibilities. The individual may be a hard drinker and yet show no signs of drunkenness, and may drink to excess, and presumably to a degree to shorten life, still it will be exceedingly difficult to prove this.

Several English companies refused to pay premiums to the families of hard drinkers, and in court the family were able to show that the decedents had never been thought drunk. When asked to define drunkenness, the Judge stated it was a state in which a man loses his reason and the use of his legs, and is incapable of responding to questions when addressed. This is a most general definition, when we bear in mind the variety of conditions in which the same state of affairs exist.

CHAPTER VI.

SUICIDE.

Medico-Legal Questions Arising in Connection therewith.—The medical man is often expected to make examinations of dead bodies and to testify in court in regard to suicide, and the duty is by no means a light one, for it may involve very serious responsibilities. The question that may arise is, whether suicide or homicide has been committed. He is also called upon to consider cases of life insurance; for it is not uncommon nowadays for persons to insure in heavy amounts, and then make away with themselves, so that their families may be provided for, or their creditors may be paid. In a class of cases, which must hereafter arise in greater numbers than they already have in the courts, it becomes our function, since the laws are so strict in regard to the punishment of would-be suicides, to pronounce upon the responsibility of the individual who has been arrested while making an unsuccessful attempt to do away with himself. In such examples as the life insurance cases, the question of insanity comes up, and we are to decide the criminal and civil obligations that may be submitted to us in court, so far as the mental condition of the suicide is concerned.

Principal Modes of Death.—Under the first head; namely, cases in which a doubt exists whether the crime should be designated suicide or homicide, it behooves us to carefully investigate the mode and cause of death; the presence of wounds or contusions, and the situation of such injuries; the question also arises whether the wounds were inflicted perhaps on a body already dead for the purpose of directing suspicion and baffling detection. In cases of drowning the evidences of a possible struggle must be looked for, and regard should be paid to the place chosen for the deed. Where death has been brought about by poison, we are to determine the character of the poison used, and its effects in point of time as contrasted with the evidence of those who last saw the patient

alive. We are also to ascertain the possible motive of the supposed suicide, his relations to his family, and in fact all the circumstances of the individual's life.

Wounds Inflicted by Suicides.—The wounds made by the suicide are rarely incised, and stabbing is very uncommon. The exception however to this rule is where the method has been throat-cutting; and it is exceedingly difficult to differentiate the wounds that have been inflicted by a murderer or a suicide; both may be made with the razor, and by the latter such is usually the case. In both instances there are a series of preliminary cuts, known as *tentative*, which are to be found at the place of commencement of the major incision.

Direction of the Wound.—We are to determine in doubtful cases the side of the neck at which the wound starts, and we are generally able to detect the beginning, the center, and termination of the incision by the varying depth. Ogston states that the commencement of the incision has but one point, while the latter part ends in a bifurcation or several divisions. The tentative cuts, as I have said, are those which may be found near the commencement of the wound, and do not connect with the large incision, but may be superficial, and above or below it. The deepest part of the wound is usually at the commencement.

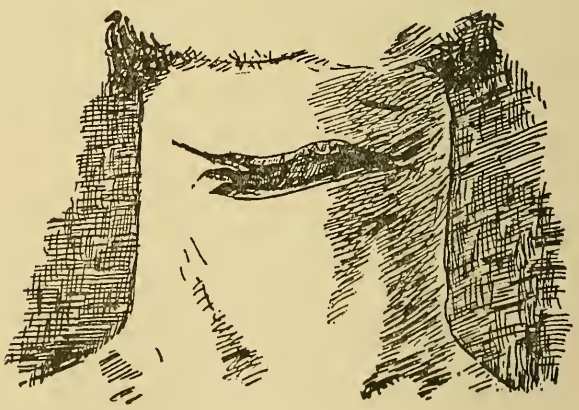

Fig. 6.
Suicidal Cut-Throat.
(Ogston.)

It is important in cases of suicide to notice that the wounds

usually runs from left to right, except in rare cases where the patient is left-handed ; while the reverse is ordinarily the case in murderous wounds.

As a rule it may be assumed that in wounds of the throat inflicted by suicides, especially those who know nothing of the anatomy of the parts, the point of commencement of the wound is usually higher than the termination. It is often difficult, however, to determine this question with any degree of certainty, and curious instances are brought forward in which suicidal attempts have been made not only by left-handed persons, but by those who held a knife in each hand and make a double wound. In such a case as the latter, of course, we would, under ordinary circumstances, be utterly powerless to speak with any measure of positiveness.

Number of Wounds.—In suicidal cut-throat there is usually more than one wound, and this is more frequently so either in timid persons or those who are more or less under the influence of drink, and this is apt to be the case although a man may be wrought up to steadiness with alcohol and may make a deep unwavering cut.

Casper relates the following cases in which the difficulties in judging of the character of a wound by the direction are shown : "Upon one and the same day we dissected the bodies of two men, one 21 years of age and the other 50, both of whom were well known to have killed themselves by cutting their throats with a razor, the former three and the latter two days previously. I relate these two cases because, in the first place, although they were both indubitably cases of *suicide*, yet the wounds were perfectly *horizontal*, so that it was perfectly impossible to say where the wounds had commenced and where they ended. Further, there was this peculiar circumstance in relation to the body of the older man, that even the hands had been washed before it came before us for examination, and in respect of the younger man, that his *left* hand was completely besmeared with blood, the right much less so ; further that the left hand was quite spasmodically contracted, the right not. These appearances induced us to suppose that the incision must have been made with the left hand, and this supposition was subsequently ascertained to be correct by the inquiries of the police."

Homicide Distinguished from Suicide.—In these cases, also related by Casper, the evidences of homicidal acts are distinguished from those of a suicidal character : "Some time back the body of a man was found lying on the high-road. The

throat was severely cut, and he had evidently died from hemorrhage. A bloody knife was discovered at some distance from the body; and this, together with the circumstance of the pockets of the deceased having been rifled, led to a suspicion of murder. This idea was confirmed when the wound was examined. It was cut, not as is usual in suicide, by carrying the instrument from before backwards, but as the throats of sheep are cut. The knife had passed in deeply under and below the ear, and had been brought out by a semi-circular sweep in front, all the great vessels of the neck, with the œsophagus and trachea having been divided from behind forwards. The nature of the wound at once rendered it improbable that it could have been self-inflicted; and it further served to detect the murderer, who was soon afterwards discovered, and executed."

"With reference to the extent of the wound, the celebrated Earl of Essex's case has often been quoted. He was found dead in the Tower in 1683, and it was the generally received opinion that he had been murdered by persons hired by the Duke of York, afterwards King James II. Upon examining the wound, it was found that the jugular vessels, trachea, and œsophagus, were cut through to the very neck-bone. The verdict was suicide. In 1688 the matter was revived, and before a committee of the House of Lords, it was proved that the razor which the wound was inflicted was found on the left side of the body, while it was known that the Earl was left-handed. The edge of the razor was found notched; and it was also proved that the cravat worn by the deceased was cut through, and his right hand was wounded in five places.

"The committee made no report. Lord Delamare undertook to draw it up, but before he did so, Parliament was prorogued. Bishop Burnet, who has given the particulars of the case with great minuteness, says he had no doubt that the Earl of Essex committed suicide. He was subject to fits of deep melancholy, and maintained the lawfulness of suicide."

Location of the Suicidal Wound.—The location of the suicidal wound is a matter of a great deal of importance. It is, of course, unlikely that the back would be found to be the site chosen, while writers upon medical jurisprudence generally admit that the suicide very rarely inflicts a wound upon the left side of the body. Self-inflicted injuries are usually upon the front of the body.

Seat of Wounds.—The suicide is very apt to choose certain situations which would not naturally be selected by the murderer for the infliction of violence. Thus we find that they very often place the muzzle of the pistol into the mouth, or fire so that the ball passes evenly through either temple. They select the most vulnerable or vital point. Pistol wounds are very rarely made by suicides in other parts than the head, excepting, perhaps, the region of the heart. But the murderer, if he selects the head, usually fires from behind; or if he aims at the trunk his ball enters at some point where the suicide would never think of wounding himself, or perhaps where he could not if he would.

Contusions Unusual.—Contusions are very rare among suicides, unless they be due to injuries received just after the fatal act has been committed; as when the victim falls upon the rocks or from a height; but under such circumstances no reasonable doubt can be entertained as to their origin and nature, for they are not in situations where they undoubtedly would be if self-inflicted. Of course, reasonable doubt may sometimes arise when different sides of the arms or legs or irregular parts are conjointly injured, where there has been a fall. In multiple injuries inflicted by an assailant there will be some regularity in the distribution of the contusions. It has been said by Ogston that very severe contusions by such weapons as an ax or hammer, or some other ponderous instrument, are more often suggestive of murder than suicide, and it is impossible to arrive at any conclusion as to their being due either to suicide or accident.

Position of the Weapon.—The presence of a weapon, either in the hands of a suicide or near him, strengthens the probability of a self-perpetrated crime; though, as we all know, the pistol may be placed in this position by a cunning murderer to conceal his act. In the suicide we will probably discover a spastic contraction of the fingers or a naturalness in their position which could not be arranged or effected by another person. So, too, it sometimes happens that the suicide provides himself with a gun, and his position with reference to the instrument may settle the question of self-murder. Concealment of the body, removal of the weapon, or, as it occasionally has happened the placing of a weapon near the body in such a position that the suicide could not have reached it, or where he could not have thrown it, suggest homicide most strongly.

Accomplishment of Suicide by Men and Women.—Men and women commit suicide in different ways. It is quite rare to find a woman who has shot or stabbed herself. We do, however, find that if the self-inflicted wound has been made by her, it, as a rule, consists in the opening of a vein with a penknife or pair of scissors, or some small weapon. Women usually make away with themselves by poison or by drowning, or, rarely, by hanging; while men in many cases seek the pistol, razor or the knife.

Suicide by Drowning.—Suicide by drowning is a quite common method, and we are very often required to distinguish between accidental and suicidal death.

In cases where murder has been committed it is a somewhat common occurrence to find that the victim has first been murdered and the body then t' rown into the water for the purpose of giving the impression that the victim has taken his own life. In this case if the body bears wounds, we are to determine whether such wounds are post-mortem or if they have been produced just before death; in the latter case an assault will be suggested.

Multiple Attempts.—In rare instances, however, suicides have been known to stab or shoot themselves before resorting to the water; but here we will often find that the situation of the injury is inconsistent with murder, and it is probable that the pistol or knife will be found near the body of the victim. Post-mortem wounds are usually of a character which suggests the improbability of self-infliction. Violence, such as a fall upon the rocks, or that which would occur as a consequence of the body being dashed against a dock or crushed beneath shipping, will sometimes produce quite suspicious cuts and blows. Ogston refers to a double dislocation, resulting from forcible contact with the bottom of a large ship, the body having been in the water some time. In other cases of this kind we usually find multiple injuries, for the severe force that produces such a notable accident would give rise to minor fractures and dislocations as well. Ogston also relates an instance where a female suicide received a laceration of the perineum by the forcible separation of the thighs on coming in contact with the water. The collision with some obstacles in his way, when falling into the water, may also cause formidable injuries, which may be imputed to violence the victim has received at the hands of another person.

Deliberate Preparations — Rope Tying. — Suicides

sometimes tie themselves up so that their attempt shall not miscarry, and this may perhaps suggest when the body is found that a homicide rather than a suicide has been committed. Such a method of disposal of the body by a murderer is unusual, however, and a careful examination of the knots and turns in the rope will indicate that they have been made by the person himself before taking his own life.

"A man, with his wife and child, was reduced to great distress. On a certain day he took an affectionate leave of his family, declaring he would not return until he had procured some employment by which he would be able to buy bread for them. On the following day he was found drowned in the New River, with his hands and legs tied. A card with his address was found in his pocket."

Casper also relates the following interesting history, when the person had been murdered and then tied up and the theory of suicide was disproved by the head injuries:

"In April, 1848, an unknown body was taken out of the Spree, which was, however, soon recognized as the body of a shipmaster, who disappeared from his vessel on the evening of—say the 18th of March, 1848, and had not since been seen. A well-grounded suspicion of robbery and murder was directed against the servant of the deceased, who, on the morning of the 18th of March, when no man in Berlin could foresee the dreadful termination of the day, had locked up a considerable sum of money for his master, which was missing from the broken chest on board the ship, and part of which, along with articles of clothing belonging to the deceased, was found with the servant, who, however, obstinately denied his guilt. For the accusation, it was a most probable supposition, that the servant, on the evening of the 18th of March, when the fires of riot raged in Berlin, had taken advantage of the general anarchy and confusion to perpetrate a robbery and murder, which he might hope would remain undiscovered at such a time.* * *

"But to return to the dissection, at which of course we had not the slightest suspicion of these discoveries. The body when taken out of the water had on a thick brown cloth overcoat, a handkerchief and several rags were *wound round the head*, and *tied* with a cord round the neck, the legs were also tied together with a string. The body was already grayish-green, consequently far advanced in putrefaction. (The temperature of the spring had been with us continuously high). The bluish-green and swollen tongue protruded from between the toothless jaws. No mark of strangulation could be seen upon the neck.

"But there were important *cranial injuries*, one three cornered one with blunt ragged edges over each eyebrow, and one an inch long on the right parietal bone ; in at least two of these wounds ecchymoses were brought to light by incisions. When the epicranial aponeurosis, covered with half coagulated blood, was torn off we found a complete smashing of the whole skull, including even the *basis cranii* ! The brain, a (bloody) pap, as is always the case in bodies so far advanced in putrefaction, could no longer be investigated.

"The lungs, especially the right one, were distended with black and not very fluid blood ; the trachea and larynx were blackish-blue from putrescence, and empty ; the heart was perfectly empty, as were also the large thoracic vessels ; the stomach empty, as was also the urinary bladder ; of course in such a degree of putridity the vena cava was likewise empty, and except the advanced degree of putrescence of all its organs there was nothing else remarkable in the abdomen. It was, as is evident, a very plain case. It was just as difficult to understand why a suicide should have so bound and tied his head and legs, even if he could have done so before throwing himself into the water, as to conceive what could have induced a third party to do so, when his intention was simply to throw the man into the water and drown him. There were certainly no proofs found in the body of death from drowning, and the advanced stage of putrescence would have rendered these very uncertain even had the man been actually drowned—but it was easy to prove that this shipmaster had not been drowned, but had been killed by the fearful cranial injuries inflicted on him, and afterwards bound up and thrown into the water, since the ecchymoses found proved that these injuries must have been inflicted during life, and thus rendered untenable the assumption that they might possibly have been accidentally inflicted on the corpse while floating in the water. Moreover, the nature of these important cranial injuries, particularly the fracture of the *basis cranii*, always necessarily presupposes the employment of the utmost violence by means of blunt weapons—we adduced as examples of such an ax, hammer, club, etc.—such as could not possibly happen by simply floating against piles, or by being struck by stones or rudders. Accordingly—apart from the then statutory questions—we assumed that the deceased had not been drowned, but had been killed by (absolutely fatal) cranial injuries, and only thrown into the water after death, and that these cranial injuries had been inflicted with very considerable violence, and with a blunt weapon.

"So much for our task; the reader will perhaps be interested in the following appendix. Every body was fully convinced of the guilt of the accused, and yet the verdict was as it ought—'not guilty!' For the identity of the body was doubtful, as first appeared at the time of the public oral trial. The widow of the murdered man, living in a small provincial town, was summoned to the trial in order to confirm supplementarily the identity of the body from the articles of clothing, and the external description of the body contained in our protocol of the inspection—she had not been summoned for this purpose at the discovery of the body, because it was at that time wholly unknown. She recognized the articles of clothing, but when questioned about the color and condition of the hair, eyes, and teeth, etc., of her husband, this very feeble minded woman gave indistinct and wavering answers. Thus, as we said, it ramained doubtful whether the body of the murdered man was that of shipmaster K., and therewith fell the proof that the accused, his servant, had murdered his master."

In some cases we shall find evidences of disease which has given rise to delirium leading to the act of self-destruction, and I regard such help as very important. The appearances of inflammation of the brain, effusion of lymph, and signs of meningitis are too important to be overlooked.

Condition of the Organs of Circulation.—Writers upon medical jurisprudence suggest that the condition of the organs of circulation will often enable us to arrive at a correct idea as to the condition of the person just before death, and the question whether there has been a struggle; we are also to take into account the degree of cerebral congestion. In cases where death has presumably occurred before the body was thrown into the water we of course find none of the physical evidences of death by drowning, which a struggling man makes who is at first in possession of his senses.

Suggestion of Putrefaction.—Caspar refers to the many difficulties that may beset us in our attempt to unravel the mystery that belongs to many doubtful suicides. He speaks of the post-mortem changes that are to be found when a body has remained a long time in the water, is consequently putrified, and where there has been an escape of blood into the cellular tissue, and he tells us how easy it is to mistake such conditions, as well as those post-mortem elevations of the scalp which depend upon effusions of blood as the result of putrefactive decomposition, for injuries supposed to have been inflicted by

other persons. It is never safe to testify too positively in regard to the state of the body of those not recently drowned, and it is just such cases in regard to which ignorant people are inclined to form hasty opinions.

Weights in the Pockets of Deceased.—It is held by some authors that the presence of stones in the pocket of the suicide, where there are no marks of violence upon the body, is suggestive of suicide, although it is not uncommon for a murderer to attach weights to the body of his victim; but in the latter case we shall probably find that there are some evidences of a struggle.

Suicide and Drunkenness.—We are also to be on our guard in regard to the fact whether the drowning has been the result of a drunken spree. The presence of written matter upon the person of the suicide, or notes in his diary, of course need hardly be mentioned as suggestive hints which should enable us to form an opinion.

Suicide by Hanging.—French medical literature abounds with cases in which the question of suicidal hanging arises, and in this connection some examples are reported of murderers who have first disposed of their victim, and then suspended him to give the idea that he had taken his own life. Such examples are rare in this country, and it is only in those cases where the victim has first been poisoned, that the diagnosis of the mode of death might be obscured. Even in some instances the possible detection of its presence might be easy, but a murderer would not resort to so clumsy a method, for he would not be sure of the duration of the effects of the poison before death actually occurred. In most of the reported cases there are head injuries that could not be self-inflicted. It is undoubtedly the fact that sometimes the suicide resorts to several methods before he ends with hanging to make sure. Taylor says:—"The discovery of a person dead from hanging is presumption of suicide all other circumstances being equal." He, however, makes certain exceptions, which are:—"1. The fact of the person hanging being feeble, and the assailant a strong man; 2 The fact that the person hanging has been stupified by narcotics, or intoxicated, or has been worn out and exhausted in a struggle; 3. In all cases when a number of men are arrayed against one (Lynching.)"

In homicidal hanging there are usually some marks resulting from a struggle with the assailant, although this is by no means

necessarily so. Taylor refers to the case of a woman who hung her husband who while lying asleep was approached by his wife who managed to twist a rope about his neck and tie it to a beam raising his head. The husband who went to bed sober denied all knowledge of the murderous attempt when he was resuscitated. The wife was drunk and Taylor thinks the man must have been likewise, and this author does not believe that any attempt of this kind could have been carried out unless such was the case.

Fig. 7.
Suicidal Hanging.
(Taylor.)

No reliance can be placed upon the statement of some authors who believe that a differential sign between suicidal and homicidal hanging is that in the latter two marks of the rope will be found upon the neck of the dead body.

Careful autopsical investigations may reveal in suspected cases the marks of homicidal violence, rupture of the internal organs for example.

The Case of the Duc de Bourbon.—Winslow, in his "Anatomy of Suicide," relates the following cases, the first of which is the celebrated case of the Duc de Bourbon:

"On the 27th August, 1830, the duke was found suspended in his bedroom, in the Chateau of St. Leu. An inquest was

held the same morning on the body, and from the evidence of the witnesses, as well as from the reports of the physicians and surgeons who examined it, a verdict was returned to the effect that the duke had committed suicide in a fit of temporary insanity. This event did not excite much notice until the contents of his will were made public. The deceased, it appears, had made his will in favor of the Baroness de Feuchéres, a female who had lived with him for some years, bequeathing to her the whole of his immense estates, and leaving the Duke d'Aumale, the youngest son of the king of the French, residuary legatee. The Princes de Rohan, heirs by collateral descent to the deceased, thus finding themselves deprived of an expected inheritance, attempted to set aside the will, alleging that undue influence had been exercised over him. The cause came on for hearing before the First Chamber of the Civil Tribunal of Paris, in December 1831, and excited considerable attention, not so much in consequence of the dispute concerning the validity of the will, as of the question which was raised during the trial—whether the duke had committed suicide, or whether he had been murdered, and afterward suspended in order to defeat the ends of justice. The facts of the case, collected from the procés verbaux, are as follows :

" The deceased had naturally partaken of the alarm which had diffused itself throughout France in consequence of the events of the revolution of 1830. Some of his most intimate friends declared that for some time previously to his death, his mind had been filled with the most gloomy forebodings as to what this new order of things would bring about. On the morning of the 27th his servant went as usual to his bedroom door about eight o'clock ; but receiving no answer on knocking, he became alarmed. Madame de Feuchéres then accompanied the valet to the door of the room which was fastened on the inside ; and receiving no reply after calling to the duke in a loud voice, she ordered it to be broken open. On entering the apartment, the body of the deceased was found suspended from the fastening at the top of the window sash by means of a linen handkerchief, attached to another which completely encircled the neck. The head was inclined a little to the chest ; the tongue protruded from the mouth ; the face was discolored ; a mucous discharge issued from the mouth and nostrils ; the arms hung down, the fists were clenched. The extremities of both feet touched the carpet of the room, the point of suspension being about six feet and a half from the floor ; the heels were elevated, and the knees half bent. The

deceased was partly undressed : the legs were uncovered and had some marks of injury on them. Among other points of circumstantial evidence, it was remarked that a chair stood near the window to which the deceased was suspended, and the bed looked as if it had been lain on.

"The medical witnesses, who examined the body soon after its discovery, stated that they found it cold, and the extremities rigid, from which they inferred that the deceased had been dead eight or ten hours. This would have fixed the time of his death at midnight of August 26th. The body underwent a second examination, a report of which was furnished to the legal authorities on the following day. Five medical men were present at the inspection ; and they gave it as their opinion from the post mortem appearances : 1. That the deceased had died by hanging ; and, 2. From the absence of all marks of violence or assistance about the person or clothes of the deceased, and other facts, that he had destroyed himself. They considered that the contusion on one arm and the excoriations observed on both legs, must have arisen from the rubbing of these parts against the projecting rail of the chair near the window. The mark on the neck of the deceased they described to be large, oblique and extending upwards to the mastoid process.

"General evidence was given to show that the Duke had meditated self-destruction, and had conversed about it with some of the witnesses. On the morning of the 28th, some fragments of paper which had been written on were taken from the grate of his chamber ; these were carefully put together by one of the legal inspectors ; and among a few disjointed sentences, indicating despair and a dread of impending danger, were the following :— 'It is only left for me to die in wishing prosperity to the French people and my country. Adieu forever ! ' Here followed his signature and a request to be interred at Vincennes, near the body of his son, the Duke d'Enghien. It is necessary to observe that no noise or disturbance was heard in the bedroom on the night of the deceased's death.

"On the other hand it was contended that the duke was not unusually melancholy before his death ; that the supposition of suicide was inadmissible in a moral point of view, and indeed, was physically impossible, from the circumstances. One person argued that he could not have made the knots seen in the handkerchief ; another that he could not have reached so high above his head to have suspended himself, and that the chair could not have been used in any manner to assist him ; while a

third affirmed that a person might be suspended in the position in which the body was discovered, without death ensuing. The circumstance of the door being fastened on the inside was accounted for by supposing that the bolt had been pushed to from the outside. The duke had been heard to condemn suicide; he had made an appointment for the following day; and had attended to many little circumstances, such as winding up his watch the night previously and noting his losses at play; facts which were forcibly urged as being opposed to the supposition of his having destroyed himself.

"To combat the medical evidence, it was assumed that the deceased was strangled or suffocated, and was afterwards hanged by assasins. Several schemes were devised by the medical witnesses on this side of the question, to account for the manner in which the supposed murder was committed.

"According to some, a handkerchief might have been tightened round the deceased's neck by one assassin, while another forcibly held his legs under the bedclothes, by which the lesions already described would have been produced, or instead of being strangled by a handerchief, he might have been suffocated by a pillow placed over his mouth. The body might then have been dragged across the room to be suspended; and if during this time the hand of one of the assassins had been rudely thrust between the cravat and the neck, the excoriation and mark seen on the skin might be accounted for. The counsel for the appellants remarked that the want of a line in writing, to withdraw from all suspicion, his attendants and even Madame de Feuchéres, was remarkable, as this *latter precaution* had suggested itself to *almost every suicide*. He condemned those engaged in the anatomical examination of the body, as having been guilty of culpable mismanagement. He ridiculed the idea that the duke, as reported by the two physicians consulted, had probably come to his death through asphyxia by strangulation. He contended that all the appearances on the skin of the neck, where no ecchymosis, *as is usual in persons hung alive*, was visible, *showed that death had preceded the hanging of the body*.

Beck reports a case of a suicide, and the punishment of an innocent person for supposed murder: "Marc Antoine Calas was the son of John Calas, a merchant of Toulouse, aged seventy years, of great probity and a Protestant. He was twenty-eight years of age, of a robust habit, but of a melancholy turn of mind. He was a student of law,

and becoming irritated at the difficulties he experienced (in consequence of not being a Catholic) concerning his license, he resolved to hang himself. This he executed by fastening the cord to a billet of wood placed on the folding doors which led from his father's shop to his store room. Two hours afterwards he was found lifeless. The parents unfortunately removed the cord from the body and never exhibited it to show in what manner his death was accomplished. No examination was made. The people, stimulated by religious prejudice, carried the body to the town-house, where it was the next day examined by two medical men who, without viewing the cord or the place where the death had been consummated, declared that he had been strangled. On the strength of this, the father was condemned by the parliament of Toulouse, in 1761, to be broken on the wheel. He expired with protestations to heaven of his innocence.

"Reflection, however, returned when it was too late. It was recollected that the son had been of a melancholy turn of mind; that no noise was heard in the house while the deed was doing; that his clothes were not in the least ruffled; that a single mark only was found from the cord, and which indicated suspension by suicide; and in addition to these, that the proper dress for the dead was found lying on the counter.

"Voltaire espoused the cause of the injured family and attracted the eyes of all Europe to this judicial murder. The cause was carried up to the Council of State, who on the 19th of May, 1765, reversed the decree of parliament and vindicated the memory of John Calas."

Suicide by Poisoning.—Suicide by poison, as I have said, is more commonly resorted to by women than by men; and oftentimes there is no difficulty in determining whether the method of death was suicidal or homicidal. As a rule, the poisons used by suicides are those which would not be selected by a designing murderer, and especially true is this among the lower classes. In the city of New York, Paris green, which is bulky and undisguisable, is employed very much more often than any other substance for the purpose of self destruction, and laudanum perhaps comes next. The mineral acids and oxalic acid, as well as other irritant substances, are frequently made use of for the purpose. As most of these poisons do not kill immediately, we are often enabled to watch the patient, and consequently learn the nature of the crime; for as a rule a period of regret and remorse attends the commence-

ment of disagreeable effects, and in the majority of cases the would-be suicide appeals piteously for help.

The doubtful cases are those where narcotics are administered and where unconsciousness rapidly supervenes. The selection of the poison should be taken into account and may have a modifying influence upon the opinion of the expert.

It is not rare to find a certain epidemic character in the occurrence of self-destruction, and I have known of several persons who used some unusual poison, the fashion having been set by a suicide the circumstances of whose crime were widely spread in the newspapers. Thus the daily press may teem with cases of poisoning by cyanide of potassium or chloroform, or perhaps some well known rat-poison, all occurring within a short time.

Sometimes, as I have said, a person will disavow his intention of committing suicide. Such a case is reported by Caspar, the subject being a strong, healthy apprentice, sixteen years old, who had declared during an illness that some one had given him sulphuric acid to drink instead of a dram. The circumstances that there were no marks of cauterization on the lips, and that the appearances on dissection betokened that no inconsiderable quantity had been swallowed, prove indubitably that this statement was untrue, and that his illness and death had been voluntarily induced. The tongue was white, and the epithelium were easily scraped off. Besides, very active appearances of deep tissue changes and perforations of the pharynx and stomach, and a collection of grumous blood were observed, and there were other evidences.

Evidences of Pre-Existing Disease.—We are to examine into the possibility of some serious form of bodily injury or disease. While suicide is extremely rare among consumptives, we often find it resorted to by the victims of alcoholism in its various forms, neuralgia and other conditions of the nervous system attended by great pain and suffering. A perfectly well and happy man is very unlikely to commit suicide, and where an allegation of self-destruction is made, especially by interested persons, it is but natural that we should be suspicious.

Hallucinations and Suicide.—Hallucinations very often lead to the commission of suicide. Much has been said about their influence, as well as that of other forms of insanity upon a previous page, but I may be pardoned for referring to an interesting case at this place in illustration of a very common incentive. It is related by Brierre de Boismont :

"A man employed in a tobacco manufactory began by reproaching himself for embezzlement. He struggles against this idea, but it will not quit him ; he thinks then that he sees at every instant the police around him, who come to hurry him away to the scaffold. Wishing to spare his wife this shame, he remained an entire night, while she was asleep, with the razor at his throat. Fortunately the thought changed ; perhaps he yielded to a gleam of reason, to an instinctive movement of affection ; he threw away the deadly instrument. The next day he was brought to the establishment in which I was physician. For two days he had been unceasingly pursued by the same vision. I had just quieted him, when in about a quarter of an hour he was found drowned in a small garden tub, from which he was extricated with difficulty. If this man had cut his wife's throat and killed himself afterwards, the cause of this fearful tragedy would have been attributed to any but the right motives."

The Love of Notoriety.—It is well known that an all-absorbing love of notoriety may lead the person to take his own life. Forbes Winslow collects a number of cases which are not without interest.

"The man who was killed by attaching himself to a rocket, and he who threw himself into the crater of Mt. Vesuvius, were no doubt stimulated by a desire for posthumous fame.

"Some years ago, a man hung himself on the threshold of one of the doors of the corridor at the *Hôtel des Invalides*. No suicide had occurred in the establishment for two years previously ; but in the succeeding fortnight *five invalids hung themselves on the same cross-bar*, and the governor was obliged to shut up its passage."

Relation of Life Insurance to Suicide.—The relation of suicide to life insurance is one occasionally giving rise to law-suits, for it is no unusual thing for a person to heavily insure his life, and then under the pressure of impending ruin make way with himself, so that his family may be provided for. It is true that but few of such cases have been contested in the courts, and the point at issue has been the question of the insanity of the suicide. While it is difficult to imagine that any earthly ends of a sordid nature are greater than the love of life, still we must confess that the same motive that leads a soldier into battle, or to enter a forlorn hope where death is certain, may in another and a dishonorable way be productive

of an act of *felo de se;* and in the majority of cases reported there is no reason to suppose that the insured is not in his right mind.

One of the earliest cases of suicide attempted for the purpose of defrauding a life insurance company was that of "Borrodaile *vs.* Hunter," which was tried in England in December, 1841. The Rev. William Borrodaile had insured his life for the sum of one thousand pounds in the London Life Association, on February 16, 1841. He made deliberate preparations, and climbed over the parapet of Vauxhall Bridge, threw himself into the river and was drowned. The suit was brought to recover the sum of the policy, and was contested by the insurance company. The Rev. Mr. Borrodaile had always been a man of happy and even temperament, conscientious, and respected by every one. A year or so before his death he became responsible for a tax collector, who shortly afterwards turned defaulter, and this action so shocked the reverend gentleman that he settled into a condition of melancholy, was greatly depressed, evinced loss of memory, was reserved, taciturn, and suffered greatly through physical changes, loss of sleep, and was to all practical purposes not in his right mind. He told the wife of the tax collector that he did not know sometimes what he was doing or where he was going, and appeared to have lost all control over himself. So great was his want of confidence that he begged his brother-in-law not to leave him. His altered demeanor was conspicuous, he no longer paid attention to his religious duties, and went through those required of him in a mechanical way, and was seemingly in a daze. On the day of the suicide he appeared to better advantage, and left the house dressed for traveling, ostensibly to see his wife. He was at a neighboring village, but expressed his intention of returning in time for dinner at six o'clock. He, however, never returned to his home. The policy was contested by the company, and it was alleged that a provision of the same had been violated, the insured having died by his own hand; that in addition, there was nothing in his behavior to prove him to be of unsound mind. The charge of Justice Erskine in this case is one that has been often referred to since. He says: "In this case there could be no dispute as to the facts, but the question resolved itself into a dry point of law, on the finding of the jury whether a party who dies by his own hand, unconscious of right and wrong, thereby avoids the policy." "There could be no doubt that the insured's throwing himself into the water was his own voluntary act, but whether he had the will to destroy himself

knowing what the consequences of throwing himself into the water would be, was a question which he must leave to them (the jury) to decide upon the evidence." The verdict was entered for the defendants, with leave to move to enter it for plaintiff. This verdict was arrived at by the jury, who decided that Borrodaile had shown no previous evidences of insanity before the suicidal act which he had eventually committed for the purpose of destroying himself, and "that he was not capable of judging between right and wrong at the time that Mr. B. threw himself from the bridge with the intention of destroying himself." A year later an appeal was taken from this finding, Sir Thomas Wilde moving that a verdict be entered for plaintiff, and contending that "after all, the jury had found that Mr. Borrodaile was *non compos mentis :*" and argued that the condition of the policy, by which it was provided that the policy should be void in the event of the party dying by his own hand, must be construed to mean "in the event of the party's becoming *felo de se.*" The court granted a rule to show cause. Mr. Sergeant Channell a few months later answered, that the deceased had thrown himself from the bridge with the intention of destroying life, and knew that his act would have this result. He therefore "contended that if the insured by his own agency produced death, the policy was void, and the verdict ought to remain with defendants. On the other hand, it was urged that the legal result of the verdict excluded intention in any sense which could make the policy void, and that it was equivalent to a verdict of *non compos mentis.* It was finally decided that a verdict should be entered for plaintiff. In this case, I am convinced that there was little doubt of the insured's insanity ; but as a rule such cases will not bear the test of criticism.

An American case of some interest is that of "The St. Louis Life Insurance Company *vs.* Graves,"* the facts in brief being the following : Leslie C. Graves married Mary E. Searles, both being residents of Lexington, Kentucky ; and shortly after this marriage he insured his life for her benefit in the above company for the sum of $5,000. Four months after the date of the policy the insured was found dead and alone in his livery stable, and by his side was a pistol he had borrowed from a friend. The widow brought an action, averring that the fatal shot was the result of a momentary paroxysm of moral insanity,

* *N. Y. Daily Transcript,* March 7, 1871, and Medico-Legal Soc. Reports, 1st Series.

and he had been deprived of self-control. It was proved by the defense that Graves had for a day nerved himself up with liquor, and when he borrowed the pistol and when he did the deed he was wrought up to a pitch of reckless courage. The judge to whom the case was appealed reversed the finding of the jury in the woman's behalf, holding that the act was violent and premeditated notwithstanding there was evidence to show his amicable relations with his family, and the absence of what might appear as sufficient motive.

A case is related of a young man who applied to a dispensary physician, and asked this officer to insert his (the young man's) name in the death certificate of the next person who died in the hospital, so that it might be used in obtaining the payment of a policy.

He was reduced in his affairs and wanted money to start in business, and had no means to support his family. He had a a policy on his life, which his wife would get on proof of his death. He committed suicide a few weeks after this request. There is no reason to suppose this individual was insane.

Browne refers to the law as follows: "An insurance company is not liable on a policy, if the person insured voluntarily deprives himself of life, and it seems to have been held over and over again in this connection that voluntary suicide can be committed by a person who is insane, and that the mere act of suicide itself gives no indication of the mental condition of the person who kills himself. The real question to be decided in all these cases is whether the insanity was of such a nature as to deprive the individual of all volition, or that the act of self-destruction was not the result of the will and intention of the party adapting the means to the act, and contemplating the physical nature and effort of the act." *

A case of suicide, in which the question of life insurance arose, is reported by du Saulle, and is of some interest. "On the seventh day of September, 1858, at seven o'clock in the morning, a pistol shot startled the stragglers upon one of the boulevards of Paris. From the window of a carriage smoke was seen to issue, and when the coachman stopped and opened the door, he found in a corner of the carriage the dead body of a man in a sitting posture. The left half of the skull was removed by an explosion of a double-barreled shot-gun placed between the victim's legs. This man who died almost instan-

* Cooper *vs.* Massachusetts Mut. Life Ins. Co. 102 Mas. 227.

taneously, had insured his life some time before for the considerable sum of 150,000 fr., and the companies refused to pay, because the death of the deceased had been voluntary and not accidental. In alluding to this case, 'there will be no object,' says Tardieu, 'to reproduce here the motives deducted from our observations and experiences that we have repeated in the same carriage wherein the body was found, which we consider to raise the supposition of an accident, or to conclude a suicide. We have satisfied ourselves in regard to the direction of the wound on the head, and the obliquity which existed in the position of the weapon in relation to the sides of the carriage. We shall demonstrate in the most positive manner that the attempt was premeditated, and voluntary, and that death was not the result of an accident, but a suicide.' On his side Brierre de Boismont 'sought to establish that many of the individuals who committed suicide preserved in the midst of their preparations a coolness and indifference which was remarkable, and which he was unable to find in the bearing, in the letters, and in the last acts of the individual in question; which was moral proof that he was not himself in his last hours.' The insurance companies were condemned to pay the amount of insurance."

Homicide or Suicide in Life Insurance Cases — The question of fraud sometimes arises when the insured seeks to create the impression that he is the victim of an assault.

On the twelfth day of October, 1840, a broker was found strangled in a carriage, on the road to Stettin. The bad condition of his affairs, it was thought, had led him to commit suicide. The position of the body, which had the hands crossed behind the back, the traces of robbery, led the tribunal to recognize the evidences of a violent death, and a judicial investigation was ordered; however without any result. The broker had an insurance upon his life for the sum of 40,000 fr., which would have been sent to his family only in case that death had not been the result of suicide. The officers of the bank of Gotha presented themselves before the justice, and proved that the broker had really committed suicide. They exhibited an autograph letter of the deceased, in which the motives that impelled him to commit the crime were shown, and the means to which he had resorted. The result of this document was that the broker had sacrificed his life, so that the family might be provided for and saved from complete ruin. It appeared from this letter that a friend was after

death to place him in the attitude he was found, for the purpose of supporting the idea that he had been assassinated. (du Saulle).

Tardieu reports an extraordinary example of homicidal speculation, which occurred in Sweden several years ago, in which a French company came very nearly being swindled. A life insurance was taken on the 26th of March, 1856, on the life of H., a servant, for the benefit of S., a commission merchant. H. was an unfortunate drunkard, who hung himself, but was rescued and saved by S. This fact gave the idea of speculation, and a veritable tacit contract was made with H., who promised to drink large quantities of brandy in the morning and evening, and to go without nourishment. The life of H. was prolonged through the agency of S., who, fearing the payment of a new premium, had had violent scenes with the former. H. died finally on the 31st of August, 1856, poisoned by arsenic. S. was accused and brought before the tribunal at Stockholm and acquitted for want of proof. Three years later the civil tribunal of the Seine threw aside the policy of insurance, and exonerated the company from all payment.

It occasionally happens that the religious faith of the insured person is questioned, for the purpose of proving his sense of moral responsibility. (See Appendix I.)

Doubtful Cases.—In disputed cases of suicide in this connection we must carefully investigate the history of the patient's previous life, his behavior for a short time before the deed, and his treatment of his family. It need not follow that every insured man who has a policy and commits suicide does so for the purpose of getting money for his family. Where suicide is committed by such a person under the influence of a delusion of an entirely extraneous character, or where it does not appear that the question of gain enters at all, there can be no dispute as to the fact that the policy should be paid, any more than if he died of any ordinary disease, even though he has signed a policy which contains a clause such as is found in those of nearly every company. Hereditary influences and other causes for which he is not responsible, may produce such a mental perversion as to completely destroy the individual's sense of right and wrong and his voluntary control. It happens from time to time that persons who are insured for large amounts die very suddenly after the policy has been taken out, under circumstances which, to say the least, are suspicious. But here, too, it does not do to be too

precipitate in the formation of an opinion, or too hasty in expressing it. A celebrated case was tested some years ago in an interior town of this state, and although it was shown that the insured, who had taken a policy upon his life of over $100,000, had been a few months before financially embarrassed to a serious extent, and died after a few days' illness; no causes other than those of a natural character could be found for his death, notwithstanding a most searching post-mortem examination was made, at which the physicians of both sides were present. In this case all manner of reasons were assigned for the gentleman's rather sudden demise by the opposing side, and it was even held that he had choked himself to death by means of a piece of rope. However, no evidences of asphyxia were found, and the crease which, strangely enough, some of the medical men present found about his throat, was proved beyond doubt to be due to accident. In some cases when no satisfactory cause of death can be determined, we should at as early a moment as practicable determine by every means in our power the condition of the abdominal and thoracic organs, as well as of the brain, for sometimes where no apparently sufficient lesion can be detected to account for the death a further search may disclose a minute clot either in the medulla, or a lesion may exist on other parts of the brain, which may be at first confused with post-mortem changes.

It sometimes happens that frauds are perpetrated upon the insurance companies, that dead bodies are procured and so placed as to lead to the suspicion that suicide has been committed, the companies being deceived as to the person's identity. I refer the reader to works of a larger scope in which the examination of the dead is considered.

From time to time the question arises, whether a man who commits suicide for the purpose of escaping some hopeless *physical infirmity* annuls his policy in so doing. In the case of "Isett *vs.* The American Insurance Company" this was the case, and the jury were told that they must find a verdict for the company, if they were convinced that the suicide was aware of the fact that the discharge of a pistol in his hands would produce his death, even though he destroyed his life because he was desirous of escaping some physical infirmity. Chief Justice Miller in his charge laid down the principle, that "it is not every kind or degree of insanity which will so far excuse the party taking his own life as to make the company insuring him liable. To do this the act of self-destruction must have been the consequence of insanity, and the mind of the

deceased must have been so deranged as to have made him incapable of using a rational judgment in regard to the act he was committing. If he was impelled to act by an insane impulse which the reason which was left to him did not enable him to resist, or if his reasoning powers were so overthrown by his mental condition that he could not exercise his reasoning faculties on the act he was about to do, then the company was liable. On the other hand, there is no presumption of law *prima facie* otherwise that self-destruction arises from insanity; and if you believe from the evidence that the deceased, although excited or angry or distressed in mind, formed a determination to take his own life, because in the exercise of his usual reasoning faculties he preferred death to life, then the company is not liable, because he died by his own hand within the meaning of the policy."

In regard to the punishment of those who unsuccessfully attempt suicide, we must be governed entirely by the circumstances which surround the commission of the important act, and if we find that its attempted execution is such as to suggest an abnormal degree of moral depravity or eccentricity, a great doubt of the sanity of the would-be suicide must naturally arise. I do not think there can be any doubt that where the subject resorts to sensational and odd methods, this view of the case is the right one. In such cases as that which occurred in Kentucky a few years ago, where the individual spent several days and much labor in the preparation of a guillotine, and afterwards hired a room in the hotel, where he shut himself up and was found decapitated, the manner in which the suicide was consummated suggested irresponsibility upon the part of the victim. Suicides for notoriety, examples of which I have detailed, belong to this class. A case in which no doubt of the patient's mental condition should arise, is recorded in a French journal of a man who, discovering that his mistress was unfaithful to him, called his servant to him, and told him that he intended to kill himself, expressing the wish that after his death his fat should be converted into a candle, which should be lit and carried to his mistress. He then wrote a letter, in which he told her that as he had long burned for her, she might now see that his flames were real, for the candle by which she read the note was composed of his miserable body. After this he committed suicide. Winslow, who mentions this case, refers to that of a blacksmith, who charged an old gun barrel with a brace of bullets, and, putting one end in the fire of his forge, tied a string to the

handle of his bellows, by pulling which he could make them play whilst he was at a convenient distance ; kneeling down he then placed his head near the mouth of the barrel, and moving the bellows by means of the string they blew up the fire, he keeping his head with firmness and horrible deliberation in that position till the further end of the fire was so hot as to kindle the powder, whose explosion drove the bullets through his brain. There are numerous cases of this kind, which might be narrated, but are out of place in these pages.

The examples which interest us especially in regard to the punishability of the individual are those where the person attempts his life to escape ill health, disgrace, impending financial ruin, and poverty. These are too common to need more than cursory mention, and it cannot be denied that nearly always they are the result of a low moral tone, which does not bring with it any suspicion of irresponsibility. Prompt and vigorous punishment is the most effectual remedy ; and especially is this the case where the suicide is one of a number occurring in the course of what may be called an epidemic. The low grade of moral courage which springs perhaps from slight physical suffering, which the individual does not fight against, and a loose mode of living, lacking the restraints of wholesome self-discipline, make this crime fearfully common, and undoubtedly lead to a disregard of the value of human life, which in other individuals takes the form of homicide.

Responsibility of Suicides.—The humane views of Winslow are certainly too sentimental to meet the requirements of the society of to-day, and his apology for the suicide belongs to an age when almost every species of wickedness was condoned and explained by moral insanity. I quite agree with Beccaria, that any punishment " which does not come from absolute necessity is unjust," and that crimes are only to be estimated by the injury done to society, and that the end of punishment is to prevent the criminal from doing further injury, as well as to induce others to refrain from committing similar offenses. Winslow's view is that " the unfortunate individual by the very act of suicide places himself beyond the vengeance of the law ; he has anticipated its operation ; he has rendered himself amenable to the highest tribunal, namely : that of his Creator ; no penal enactments, however stringent, can affect him." This statement cannot apply to all cases, as I have shown by the

examples where the attempt has been made to defraud insurance companies; and it cannot be denied that there is a large number of individuals whose motives, while not those of men of good judgment or sound sense, are almost the same as those of criminals who murder for petty sums, or who steal for the purpose of having themselves fed and sheltered in a prison.

CHAPTER VII.

CRANIAL INJURIES.

Preliminary Anatomical Considerations. The Skull.—The skull may be roughly described as "an egg-shaped case with a flattened under surface, the forepart of which gives attachment to the face. The sides, the top, and the back of the case are formed by flat bones, consisting for the most part of two layers, an outer and an inner table, with spongy tissues known as diploë between them; but where the walls are very thin there is but a single layer. The vault of the skull presents but two minute and inconstant openings, the parietal foramina, for the passage of small veins; but the base contains many openings and is of quite a different structure; in parts of it the bones are hollowed into mere shells, forming chambers communicating with the pharynx and lined with mucous membrane; in parts the bones contain cancellated tissue, such as is found elsewhere, and again parts are made of solid bone. The base is decidedly the weakest part. (Dwight.)

The membranes of the Brain.—Within the interior of the cranium is the brain, composed of the cerebrum and the cerebellum, beneath which lie the pons and medulla, and these are practically surrounded by three membranes, the thickest and coarsest of which is the *dura mater*, which lies next the bony surface of the cranium, and which is prolonged in broad folds forming supports for the soft structures which it encloses, there being a longitudinal extension between the two hemispheres of the cerebrum, (falx cerebri), and we find at right angles to the falx another prolongation which dips transversely downwards forming a partition between the posterior lobes and the cerebellum, (tentorium). A small fold in the median line runs from the posterior surface of the tentorium to the foramen magnum.

The Sinuses.—Running through the membrane are several important canals or *sinuses* which receive the venous blood and meet at the base of the skull communicating with the jugular

veins principally. This membrane is tough and resilient and admirably protects the nervous organs.

The dura mater is plentifully supplied by nerves from the fifth pair, from the pneumogastric, from the third, and it also receives sympathetic fibres.

The pain in meningitis, therefore, arises from involvement of the first-named nerve, and the choked disk so common with meningeal affections is due to lesion of the recurrent branch of this nerve as well.

Arachnoid.—Beneath the dura mater is the arachnoid, which covers the convolutions and contains spaces for the accumulation of cerebro-spinal fluid; that beneath the arachnoid being called the sub-arachnoid space, and that outside the sub-dural space.

Pia Mater.—The most delicate of the three membranes is the *pia mater*, which immediately invests the brain and contains in its meshes a very great number of small arteries and veins which are concerned principally in the blood supply of the cortex.

It would be going too deeply into the subject to minutely describe the anatomy of this membrane; suffice it to say that it is reflected at various situations into the substance of the brain, forming at different points the choroid plexus, the velum interpositum, and it ramifies in other directions to form the walls of the fourth ventricle, and to enter the lateral ventricles.

The Cerebrum.—The cerebrum is composed of two hemispheres and has an external investment of gray nervous matter rich in cells and having sensory functions of a higher kind, and bloodvessels and an internal collection of white matter composed of conducting fibres bound together by connective tissue, these fibres passing downwards through and between large bodies composed of gray matter and reinforced by other fibres from the cerebellum pass below, partially crossing in the medulla oblongata, the conductors from one hemisphere going in part to the opposite side of the body and *vice versâ*.

The Gray Matter.—The investing layer of gray matter or cortex has been found to have various psycho-motor functions which are seated in circumscribed areas in the different convolutions of the brain. The most important of these is the speech center located anteriorly, laterally and near the lower part of the brain in the third frontal convolution. About the fissure of Rolando which runs from the great longitudinal fissure

downwards towards the fissure of Sylvius are centers which preside over the movements of the arms, legs, certain muscles of the face and eyes ; and in the angular gyrus there is one, injury of which results in blindness. There are other centers situated at the lower surface of the brain concerned in taste and smell. Injury of the cortex at other points may give rise to very little trouble. But when the above-mentioned centers are involved we are furnished either with limited convulsions, paralyses or sensory disturbances.

When the masses of gray matter situated at the base of the brain are affected by injury or disease, very important alterations of function are manifested, and a limited lesion will cause extensive disturbance.

The White Matter.—The white matter or conducting substance is much more tolerant, and very extensive disorganization may exist without any corresponding loss of function.

The Medulla Oblongata.—Posteriorly and beneath the brain is a small mass of nervous tissue, the medulla oblongata, in which arise many of the cranial nerves ; and injury here is apt to be followed by important forms of paralysis of the organs of the face, or by death as the result by reason of the disturbance or abolition of function of the pneumogastric nerve which plays so important a part in the innervation of the heart and other organs.

The Cerebellum.—The cerebellum is situated behind and beneath the cerebrum, and is composed of gray and white matter, and it has been found that injury or disease of this body is apt to be followed by pain, inco-ordination of movement, vomiting and visual disturbanees.

The above brief description of the coarse anatomy of the brain is but fragmentary, and the reader is referred to any of the treatises upon neurological subjects for more explicit information.

Subjective Symptoms.—The chief subjective symptom of head injury is that of pain which is diffused or localized. It varies from the slight ache which follows the course of the eyes to the tearing, violent agony of meningitis or irritation. In cerebral abscess it is often intense and accompanied by throbbing, while mental labor, or causes which favor determination of blood to the head, increases all varieties of pain having this region for its seat. Neuralgia is far less common than some undefined forms, but a not unusual symptom of concussion especially is the existence of vagrant flying pains which are

neuralgic in character. A sense of pressure over the orbit is quite frequently the source of complaint, while sub-occipital or mastoid pain is of common origin in basal fracture, meningitis, and lesion the result of contrecoup.

We often find as a result of cranial injuries certain spinal symptoms which may occur either from transmitted violence, or from an extension of an inflammation lighted up at the point of injury.

Ocular Symptoms.—These are of a most variable kind, and the muscles of the eyeball or the fundus of the eye may be affected. In meningitis, or in disease attended by effusion of serum or pressure changes there may be well marked choked disk. In softening the signs of optic neuritis are quite common and in association with sclerosis of the brain consecutive to *commotio cerebri* we find atrophy of the optic disk.

In case of general compression the pupils will be dilated, or if the pressure be partial and confined to one side we will find the pupil of that side dilated.

The Differential Diagnosis of Concussion and Compression by the Ophthalmoscope.—Bouchut claims that ophthalmoscopic examination is the most certain way of determining the difference between concussion and compression of the brain. If concussion only exists, there are no abnormal appearances presented.

"In contusions of the brain, on the other hand, with or without consecutive inflammation, as well as in the case of serous or hemorrhagic effusion into the cavity of the cranium, symptoms of a more or less intense congestion are observed in the neighborhood of the ophthalmic vessels, since the disturb ance of circulation within the skull is necessarily transmitted hither. The optic nerve is swollen, appears flattened, uniformly reddened, sometimes more intensely injected. Its contour is less sharp, and it is the seat of serous swelling, which, passing over the neighboring portions of the retina, covers the border of the papilla to a greater or less degree. From these symptoms Bouchut was enabled, in four cases cited, to establish a certain diagnosis which the other clinical symptoms had failed to make good."

Sometimes ocular disturbances of previous existence may be improperly referred to the particular accident.

In Page's table appears this case in which ocular symptoms were alleged to have followed a concussion received in a railroad accident.

"Male patient, aged 14. Stunned by severe wound and blow over left eyebrow. In bed fourteen days having much pain in head. When he began to move about he found he could not see so well as before with his left eye, although for a fortnight he had been able to see quite well. Right eye lost, but not removed, four years before from blow. Examination of left eye revealed distinct evidences of old choroido-retinitis. Without going into all the pathological changes discovered, the conclusion arrived at was that the earlier attacks had been very mild, and being peripheral had caused no noticeable change of vision, and that the shock of the blow had aggravated the disease and favored the occurence of opacities in the vitreous. All parts of the equator were equally affected, which seemed to be against the likelihood of the changes having been solely produced by concussion.

"Date of settlement 12 months after the accident. Last heard of 4½ years after accident. Condition then—general health good ; eyesight unchanged. No evidence of injury to spinal cord or membranes."

Kind and Direction of Violence.—Guthrie has shown that violence applied to the front part of the head is much more apt to be attended by serious results than when the force is applied elsewhere, a fact confirmed by Crichton Browne* and others.

"Injury to the forehead," says Browne, "is exceedingly perilous ; injury to the side of the head less so," but he differs from Guthrie believing that the injury to the back of the head is almost as hazardous as in front. Our knowledge of cerebral physiology teaches us that in the middle and anterior part of the brain are exceedingly important centers which, when the seat of injury or disease are apt to be followed by various disturbances of important functions. Of course there are exceptions, and I have known of several cases where large parts of the anterior lobes, or tracts of the cerebral cortex were destroyed without the production of any lesion whatever. One case I can recall was brought to the New York Hospital—a young man who had fallen upon his head, fracturing the temporal and parietal bones, and there was a depression of the fragments deep into the region which is divided by the fissure of Rolando. When the bones were elevated large masses of cerebral substance were injured and torn, and, strange to say, no paralysis

* West Riding Reports, Vol. ii. p. 99.

followed. Large masses of the anterior lobes have been removed without peril to the patient, and the celebrated Massachusetts case in which one frontal lobe was destroyed by premature blast and the passage of the "tamping iron" through the skull is of this kind. Guthrie has told us that splinters of bone of considerable size may be lodged in the posterior part of the brain without detriment. It would be going too deeply into the field of neuro-pathology to consider fully the symptoms that follow special injuries, but it may be stated that as the result of *direct* injury and *contrecoup* a variety of changes may be produced.

Contrecoup.—In four marked cases of the latter injury at the West Riding Asylum, where the force of a blow upon one part of the skull was transmitted to a point opposite—"severe epilepsy with dementia has been noticed as the consequence of a fracture, with depression of the skull, or violent blow at the upper part of the frontal bone at a point as nearly as possible opposite to the medulla oblongata." Browne is inclined to attach much importance to blows in the frontal region as a cause of epilepsy and epileptic dementia. So far as my personal experience goes I am inclined to believe that there is a site which is more important. Blows over the fronto-parietal region are, I think, a fruitful cause of epilepsy.

Varieties of Injury.—Much depends upon the force and direction of the blow and the region injured. Quick localized blows are less apt to produce *contrecoup* than diffused force. Comparatively light blows may produce extensive injuries. More or less general symptoms are :

1. A fracture and pressure upon the membrane and brain substance.
2. Concussion and diffused lesion.
3. *Contrecoup* and resulting lesions.
4. Meningitis as a result of force applied externally without fracture.

Fracture of the Skull.—Fractures of the skull are common and the resulting symptoms are of the most variable kind. Holmes divides cranial fractures into those of the vault and those of the base; and there is another division which includes the complicated cases. We find that fractures of the vault are direct, and that there is usually a simple fissure or comminution; but the former is more apt to extend than the latter. There is displacement inwards of the fragments to a variable degree; and it does not

follow that both tables need be depressed ; and the inner may be the seat of the fracture, while the outer table remains unharmed. Sharp blows with pointed instruments are apt to produce such fractures. There is much variation in the position of the fragments ; sometimes they are depressed in the center and splintered, and Holmes refers to a form of fracture in which the depression was caused by an "oval piece of bone, which was not only driven down, but split longitudinally in two fragments which slanted towards each other, the depression being much greater at the center than at the circumference." "Such a fracture is commonly produced by some heavy body with a sharp margin applied with great force, as a horse-shoe."

The most ordinary form of fracture, according to Holmes, is that where the fragments depressed are triangular, their points being pressed downwards and their bases even with the surface of the skull. Fractures of the base are usually the result of falls, the patient very commonly alighting upon his feet, and they are generally limited. We find very often that the middle part, of the petrous portion of the temporal bone, and those parts lying immediately in front of the foramen magnum are most commonly injured, while those posteriorly situated are next in order, and fractures of the anterior parts come last. There are certain parts that are very susceptible to injury and fracture, the basilar process of the occipital bone, the wings of the sphenoid and the orbital plate of the frontal suffering from comparatively slight violence. When the bones about the foramen magnum and just anterior to it are found fractured, it is quite possible that the pressure has been brought to bear antero-posteriorly.

Undetected Fractures.—Fractures of the skull may often remain undetected during the life of the individual, and with the production of very slight symptoms, this being especially the case when the vault is affected. An interesting case illustrating the mistakes in diagnosis that may arise through the carelessness of the examining surgeon, but one most unique in its way, is that "of a woman who was admitted into the Hotel Dieu, with a wound in the temporal region, accompanied by a profuse bleeding. A fragment of bone several lines in length was found deep in the wound, and quite loose. This was removed, and the finger then passed through an opening, the circumference of which was unyielding. The case was at once thought to be one of compound fracture, with the separation of some fragments, but it was soon remarked by a by-stander

that the fragment of bone removed was dry and quite white as if it had been macerated. This led to a more careful examination of the wound, and it was discovered that the supposed hole in the skull was nothing but a laceration of the temporal fascia, and the fragment, the innocent cause of the error, turned out to be simply a piece of bone, which, lying on the ground, had been driven into the temple when the patient fell."

Injury of Cranial Nerves as a Result of Fracture. Injury of the cranial nerves is not an uncommon accident in connection with partial fractures. We frequently meet with deafness as a result of fracture at the base and various symptoms indicative of local nerve traumatisms are to be found directly after a serious cranial injury. When the fifth pair is involved the symptoms may be like those of the following case, reported by Holmes:

"A man, aged 35, having the day before been buried by some earth falling upon him, was admitted into the *Hôpital St. Antoine*, in June, 1854, in a state of perfect insensibility, and with such profuse bleeding from the nose that it became necessary to plug his nostrils. The ocular conjunctiva, especially on the left side, was distended with blood, and so, too, were the eyelids. He gradually recovered and then paralysis of various nerves became evident at different periods. The right upper lid and eyeball lost all power of motion. A few days afterwards and paralysis of the right side of the face was observed. It was not quite complete, but both sensation and motion were manifestly affected. Ten days after the patient had been in the hospital, the conjunctiva of the right eye was œdematous and much chemosed; the cornea could be touched freely without flinching; it had lost some of its transparency and at its lower part there was a yellow spot like an interlamellar abscess. Towards the end of the month the cornea presented a slight ulceration opposite to the yellow spot and the facial paralysis was even more marked. Matters went on much in the same way during the month of July, with more ulceration, however, about the eye and less paralysis of the face. Early in August the cornea gave way, and the aqueous humor escaped. Later on in the month the patient began to improve. Subsequently the right cornea cicatrized and he could see from the upper part, and ultimately both sensation and motion were restored to the right side."

Concussion.—*Concussion of the brain* is apt to produce a general disturbance of function.—The shock may be fol-

lowed by unconsciousness, vertigo, confusion of ideas, with nausea and vomiting perhaps, dilatation of the pupils, chilliness of the surface and a weak, small pulse.—This may pass off leaving the patient nervous and irritable and perhaps with headache—or it may be followed by severe cerebral disturbances, the result of an ensuing cerebritis.—The after-symptoms may develop most insidiously. A slight concussion may produce few or no effects but within a variable time, from a few hours to several days, an alarming train of nervous symptoms arises which deepens until the patient finally presents all the evidence of cerebral softening.—The *Commotio cerebri* of certain writers is a condition of this kind.

Cerebral Irritation—A form of trouble following concussion of a light grade is called by Erichsen cerebral irritation. The patient is partially conscious and in a half dazed condition with half or firmly closed eyelids. His pupils are contracted. He lies in a constrained position, usually upon his side with his thighs and his legs flexed and his hands clenched. The surface is cool and the pulse is slow and weak. He may remain in this condition for several weeks before there is a slow return to the normal state, and cerebral excitement is succeeded by prostration and stupidity.

This condition may be the starting point of serious cerebral mischief which may subsequently develop in the most insidious manner.

The books contain many cases of trivial blows being followed by remote symptoms indicative of transmitted violence and prominent among them is the abolition of functions of any one of the special senses. Blows upon the forehead have produced not only epilepsy but loss of smell and taste.

Concussion and Meningitis.—Huguenin calls attention to the meningitis that may follow concussion without any external injury. This is however not common, but when it occurs is preceded by the symptoms of cerebral irritation, by deepening coma and by great slowness of the pulse in the beginning.

Sexual Perversion in Head Injuries.—Brown-Sequard and others have shown that injury to the brain is apt to be followed by sexual perversion, loss of power to cohabit and local neuralgia. Curling and other writers have presented cases that prove beyond doubt that in some instances head injuries are followed by atrophy of the testicles. Such troubles are usually the result of blows or falls upon the back the head.

Diabetes is occasionally produced by concussion, but there is more often slight albuminuria.

Affections of Intellect from Head Injuries.—Intellectual changes of slow growth often follow slight shocks. These are seen in the departure from former habits and tastes,—moroseness or excitability, immoral tendencies and mental weakness are induced, and the person may become a whining wreck. These changes exist in a light degree or there may be actual insanity of a marked grade. Gall reports the case of a man who was injured by a falling tile which penetrated the brain. Before the accident he was an amiable steady man, afterwards he was quarrelsome and flew into a rage at little things. Browne reports the case of a patient under his observation.—

"W. H. about whom I was consulted some time ago, was a steady and respectable tradesman until he fell from some steps while cleaning a shelf in his own shop, and was stunned for a few seconds. From that time he underwent a change. He no longer attended to business to which he had been formerly devoted; he speculated and lost his savings; he manifested antipathy towards his wife and two out of his five children, and he saw his whole family reduced to penury, through his own rashness and neglect without displaying any compunctions. When complete pecuniary ruin had been effected he suddenly became himself again, and resumed industrious ways, but ever since he had attacks of restless exitability, with hatred of his wife and children twice or thrice a year. He is at all times intelligent, rational and free from delusions, and when at his best period, joins his relatives in deploring the sad visitations to which he is liable."

Condition of Duality.—Dr. Charles H. Hughes in a very interesting paper* alludes to the peculiar mental state of duality which sometimes follows head injuries; a condition in which one hemisphere apparently fills a vicarious office. He refers to a case presented by Joffe and gives the main points of the history which is the following.—"He was a married man, aged 53, healthy in childhood and youth, in manhood had headache and giddiness, was a soldier 14 years; in encounters with smugglers, received several cuts in the head. His temper was irascible, he was fond of drink, had hemorrhoids and constipation for ten years. Disposition serious. His memory

* *American Journal of Insanity*, 1875.

failing, he became unfit for service and was discharged in 1861. His pecuniary circumstances caused him great anxiety, and in the same year, (1861) he exhibited unmistakable signs of mental disturbance. He continually employed the expression 'we' —'we will go,'—'we will run,'—'we will do it,' etc. The 'other' man pulled his ear, plucked his arm, etc. His left arm had spasmodic twitchings. He invited himself to dine with his sister, saying that the 'other man' compelled him to be her guest. While eating he said, 'I have eaten enough but the other has not.' After the meal he ran out of the house, when arrested, said the 'other' was to blame, he was doing what he could to make him stop. Tried to murder a child, assigning a similar cause for the attempt. He rolled into the gutter thinking he was wrestling with 'the other,' and finally attempted to commit suicide, imagining he was killing 'the other.' This brought him to the hospital. The conformation of head was normal, pupils contracted unequally, reaction to light in both limited. Hearing normal, but saw small animals, insects, etc., with left eye, and vision dim in right eye. Tearing pains in left ear and side of face. Physiognomy anxious and expressive of suffering. Skin dry and temperature and sensibility of body natural. Pulse seventy-eight. Reflex movement to tickling soles of feet prompt. No digestive trouble.

'The other' person was in his left side under his skin. He called himself the right D—— (D—— was his name,) the left D—— was a rascal and caused all his misfortunes. He sometimes presented the picture of anxiety, dripping with sweat, and holding fast his shirt with both hands, in order as he said to make himself stop. He had violent impulses to motion, lasting an hour or two, occurring several times in the course of six weeks, which were probably epileptic or epileptoid seizures. After conversing some time, long enough probably to weary and morbidly disturb the sound hemisphere, his ideas grew confused, and it was impossible to gather any sense from what he said.

"He died of dysentery, and during the progress of the disease had no apparent delusions. 'The autopsy revealed a thickened dura mater. On the left side of the falx, there was a lamina of bone half an inch long and a quarter of an inch broad. The membrane along the course of the vessels were opaque, infiltrated with serum; their veins quite full. Convolutions of the anterior lobes, especially the left lobe, very much thinned on the convexity—*left anterior lobe*, half an inch

shorter than the right. Anterior half of ventricle of this side was adherent and hard. Optic thalamus and corpus striatum atrophied—especially the latter. Brain moist, anemic, tough. Ependyma of the lateral ventricles thickened and granulated, corresponding to the thinned convolutions of the anterior lobe. The cortex was thinned, and the adjacent medulla was indurated to the touch."'

In some cases the blow may result in a pathological condition of primary congestion and distension, subsequent anemia and distension of the perivascular spaces, and a resulting mental weakness, occurs.

Pachy-meningitis and Cranial Injuries.—Inflammation of the membranes of the brain or meningitis may be confined to the dura mater (pachy-meningitis) or it may involve all the coverings of the brain. The conspicuous symptom is *pain*, which is localized, perhaps, at first, and diffused afterwards. It is dull and severe, and as a rule worse at night. The pain is usually most severe at the vertex, and is increased by intellectual work, excitement, heat or any cause that will induce a determination of blood to the head. It may be associated with localized or general convulsions if the cerebral tissue beneath be involved, and if the inflammation be severe or extensive there will be a general disturbance of the intellect, characterized at first by delirium or mania if the inflammatory process be acute, and afterwards by stupidity and perhaps dementia.

The mental troubles vary greatly, in some cases there may be only a slight apathy, loss of memory and lack of concentration, which interferes with the capacity of the person to engage in business or apply himself in any way requiring serious attention.

Sometimes mental disease follows some years after head injuries, when no reason exists in the beginning for the anticipation of subsequent mischief.

A gentleman consulted me a few years ago for a nervous trouble that threatened to ruin him, and chief among his symptoms were those of a mental nature. He had been well and happy until a year before I saw him, and then he became irritable, morose, took unreasonable dislikes, and abused his family. At this time he had an epileptiform attack, with great headache, limited to the left side of the head. His speech was embarrassed, and he became neglectful of his business, and constantly made errors in his accounts. His left pupil was

dilated, and there was a slight loss of power upon the right side. His habits had always been good, and there was no cause discoverable. Quite accidentally I found a scar upon the left side of his head, about four inches above the ear, and upon questioning him I found that ten years before he had been assaulted on board a vessel. He had had but little suffering at the time, and as he thought recovered entirely. In this case no intimation of the trouble occurred until the development of the nervous symptoms in 1877.

Remarkable Case of Head Injury with Mental Disturbance and Epilepsy.—A case of mental disease, following a most extraordinary bullet wound of the skull, fell under my observation two or three years ago, and the miraculous recovery from the immediate effects of the wound are remarkable, and the case is a useful though rare example of how comparatively favorable the prognosis may sometimes be in serious wounds of the head.

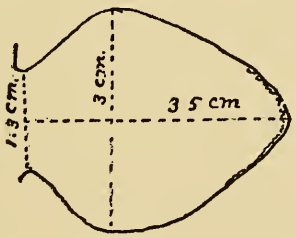

Fig. 8.

W. T. S. received a bullet wound, in the battle or the Wilderness, May 6, 1864, which penetrated the mastoid process of the left temporal bone. He remained insensible only for an hour. The missile was extracted several hours after, and was found to be a flattened minie ball. He was entirely speechless and semi-conscious for several days, and could not utter a complete sentence for a month. The wound discharged pus and small fragments of bone, and there was an escape of these substances from the meatus as well for some time. He found that he was paralyzed upon the right side, and he could not walk for a month after the accident. About ten years after the injury he began to have epileptic convulsions, which recurred irregularly every four or five months, but they have increased so that he now has them every few weeks, and they are pre-

cipitated by bodily fatigue or excitement, as well as by extremes of temperature, and they have been excited by irritation of the bottom of the large opening which is now very conspicuous. This opening is found just back and beneath the left ear, and consists externally of an orifice 1 centimeter in breadth and 1–3-10 centimeters in length ; at its inferior border it is 2–7-10 c.m. above the lowermost point of the mastoid process. Making a close examination it was found that a deep cavity projected inwards 3–5-10 centimetres, having a diameter of about 3 centimeters. Fig. 8.

At its fundus there was a granulating surface and a small quantity of pus. The left side of the face was paralyzed, ptosis of the left eye was present, hearing on the left side is completely gone, the sense of smell is impaired, and the tongue when protruded points to the right side. He has deep pain all over the head, some impairment of vision in the left eye. Tendon reflex is increased on the right side, and the dorsal clonus is decidedly active. Sensation is diminished on the right side of the body, and there is a subjective sensation of coldness. His mental condition has undergone a most extraordinary change, and while in the field he was a courageous quiet soldier, he became excitable, erratic and lost to shame, so far as some of his habits were concerned. He took to drink, and his excesses were much like those of the dipsomaniac—there being periodical debauches during which he would commit all manner of excesses, frequently being arrested. During the past four years he has upon several occasions become maniacal and attempted violence. He was destructive, and made assaults upon his immediate family. I saw him two years ago, and at my advice he went voluntarily to an asylum.

Affections of Memory after Cranial Injuries.—Mr. Joseph Bell, in a very interesting article upon the loss of memory occasionally following cranial injuries, refers to a number of cases where loss of memory occurred after very trivial scalp wounds. He tabulates these defects as follows :

" 1. An instantaneous unconsciousness ; that is to say, loss of recognition of one's individuality, followed by giddiness, stupidity, foolish talking, etc., which may pass off sooner or later, but still is in immediate relation to the accident, and gradually disappears. 2. A set of phenomena very various in nature and amount, beginning a few hours after and depending on structural and inflammatory changes in the cranial contents ; feverishness, delirium, dreams, etc., passing off into

fever or lapsing into coma, from compression ; if from hemiplegia, these may be very rapid ; if from meningitis, they may be slower, but are to be counted by days and weeks. 3. A state of phenomena of a much lighter and more dangerous character ; beginning with structural changes in the cranial contents in the direction of atrophy or softening, where you may have delusions, loss of memory, paralysis and dementia."

Bell alludes to numerous cases where in addition to the above the patient had forgotten entirely, not only the circumstances connected with the accident, but "a certain length of time, varying in different cases from minutes up to hours and even days, with all its actions, pains and pleasures before the accident happened." A recognition of this condition of affairs is of immense importance in those cases where the testimony is given concerning the details of the accident, and a strong point is very often made (and sometimes unjustly admitted in court) that the story of the patient is false, because he can not remember the manner in which he was injured or his behavior at the time ; and it may perhaps be insisted that he was drunk, when such was not the case.

Bell reports the following example, which I reproduce :

"Case 1. A. W., a very able and learned man, nearly 50, of abstemious habits and in perfect health, was rendered temporarily unconscious (for probably not above five minutes) while receiving two severe scalp wounds in occipital region by upsetting of a coach. He volunteered to me, three days after the accident, a question, including an expression of surprise, as to how I explained the fact that he had lost memory, not of what happened after the accident, but of the few minutes which had passed before it.

"Case 2. W. B., æt. 19, intelligent lad in business, was rendered unconscious for about twenty minutes by a severe concussion, the result of a railway accident. On coming to himself, remembers nothing whatever of accident or of occurrences before it, such as his walking down to the station and getting into carriage. *Note.* This condition I have observed frequently after railway accidents attended by concussion. The patients can neither understand the mental condition nor explain how it happened to them, and thus very often, from discussing the prior phenomena with friends and fellow-sufferers, having no distinct recollections of their own, get completely confused, contradict themselves in the witness-box, and are credited sometimes with imposture, and sometimes with shamming

Case 3. A young miner, who sustained an extremely severe and complicated fracture of vault of skull, with cerebral hemorrhage and many days of unconsciousness, on recovering, which he did completely, found that though the accident happened on Monday morning, he having gone to his work perfectly sober and in absolute health, he had completely lost from his life the whole Sunday, which he had spent visiting his sweetheart, and the greater part of Saturday evening and afternoon. No suspicion of intoxication or narcotics could explain away an hour of his loss.

"Case 4. A very intelligent foreman in a brewery fell down a deep well, striking the sides in his fall, and having serious scalp wounds and concussion. He, on his recovery, is so much puzzled and amazed by the loss of memory of the events which preceded the injury, that he actually makes guesses at his proceedings, but fails to explain to his own satisfaction, or that of any body else, what it was he was doing to the well and its rope. This man's case also illustrates very well one of the uncommon sets of mental phenomena following accident, which I have classed as 2, depending on structural or inflammatory changes, which are to be measured by days. After coming out of his comatose condition, he for several days was odd, speaking sensibly enough, but with an uncomfortable plainness of speech ; as, for example, he stated his belief that my head nurse and I were a set of duffers because we kept him on low diet. During this period he did not recognize his own wife, nor did not know he had such a relation, and so on.

But mark the difference. All these delusions are forgotten on his recovery, or remembered only to be laughed at—every thing in the past is now recalled, except the lost hour or two immediately preceding the accident."

The mental disturbance which follows head injury is sometimes of a violent kind, and is manifested in acts of violence. Dr. Gray reports the case of a man who killed his wife about one year after the receipt of his head injury. The patient was "aged 40, widower, eight children, iron worker, no education, uses liquor and tobacco, native of England, not hereditary. About a year before the homicide, he had his skull fractured by the fall of some bricks. He was treated in the New York Hospital, and discharged from there six months before his admission to the Asylum. Previous to the injury he had borne a good character and was a mild and inoffensive man. After leaving the hospital he suffered much from headache, of a severe character, situated near point of fracture.

He lost memory and became excessively irritable and violent if crossed or opposed in any way, and was sleepless. Three months before his admission, he killed his wife during a paroxysm of excitement, by striking her repeatedly with a chair. He was arrested and lodged in jail, but denied any knowledge or recollection of the crime. He did not manifest any realization of the occurrence until some time after, and when it had been frequently told him. He was sent from jail to the asylum, on the order of the County Judge. For a long period he suffered from headache and was at times irritable, but manifested no tendency to commit violence. He was emotional and sensitive to the remarks of other patients; although able to do light work, any unusual exertion or exposure brought on a return of the headache. He became more equable in his feelings, and feeble-minded, remained in the asylum four years, when he eloped. He has since died."

The Courts are not disposed to recognize what is legally known as "distress of mind"—that is to say the annoyance and discomfort which a healthy person may experience. It is, therefore, important for the plaintiff to prove that his mental disturbance is the result of brain disease.

CASE LV.—HEAD INJURY. CLAIM FOR DAMAGES FOR DISTRESS OF MIND NOT THE DIRECT RESULT OF ACCIDENT. DENIAL.

City of Salina *vs.* Prosper, } 27 Kansas Reports, 544.

Thompson Prosper was injured on the night of April 29, 1878, in the city of Salina, by falling through an excavation on one of the sidewalks in said city. His injuries consisted of a fracture of the skull and left knee pan. He brought suit and on the trial the jury in their verdict awarded him among other damages $1,284 for physical and mental suffering. The city appealed to the Supreme Court, and, in reversing the judgment, that court held that no damages can be recovered for mental suffering except where it is the natural consequence of the physical injury.

Compression of the Brain.—Compression of the brain may be immediate from the sudden rupture of a vessel, or it may follow concussion. The symptoms are progressive in their development, increasing as the hemorrhage continues

and bear a relation to the injury. There is a condition of stupidity which deepens into coma, paralysis and incontinence of urine and feces. The pulse is hard and full, the pupils are contracted or dilated and they may be of different size. Convulsions are sometimes found as a symptom. In some cases there may be purulent infiltration and the formation of abscesses.

When the skull is not actually fractured but when the soft parts are torn, a meningitis may arise from the extension of an inflammation with purulent formation. Venous thrombosis may be followed by extension of the morbid process. If there be a pouring out of blood between the internal surface of the skull and the dura mater, a general meningitis is apt to follow with fatal result.

Contusio Cerebri.—Actual injury to the brain substance (contusio cerebri) may occur without any external fracture, but may result from a splintering of the inner table, and the external violence may be slight. We may have transmitted violence, most likely if the head rests on a hard substance, and it be struck a dull and heavy blow on the opposite side. In such cases we have a *contrecoup*, which results in basal injury. Limited injuries are apt to produce convexity troubles and slight meningeal hemorrhages. We are to make use of these distinctions in medico-legal cases, for early symptoms suggestive of vertical irritation are indicative of a light concentrated blow ; this is especially the case if there is a limited hemiplegia. In basal injuries, from presumably heavy blows, we find predominant symptoms of cranial nerve paralysis and disturbance of the medulla oblongata.

An injury upon the left side of the head anteriorly is apt to produce aphasia.

Blows on the Side of the Head and Deafness.—Blows upon the side of the head occasionally produce deafness. Such a case I examined a few months ago. The man had fallen into a deep hole, striking the left side of his head. He immediately became deaf, and a few months later, blind in the left eye. There was subsequently a decided hemiparesis of the other side of the body.

Convulsions in Paralyzed Limbs.—Convulsions in paralyzed limbs indicate a lesion in the motor centers in the frontal and parietal lobes. Especially valuable are such indications when new parts are progressively involved.

Latent Disease in Cranial Injuries.—The mistake that may sometimes be made of overlooking latent disease is a very grave one. Especially is this the case where the subsequent death of the individual complicates matters. Abscess and tumor may exist for a long time without giving rise to any very serious manifestations of trouble. A light headache, slight mental changes, irritability and loss of memory may be all that we find, and suddenly, without any warning, the patient may drop dead; and upon autopsical examination the true nature of his disease becomes apparent. Not only in the matter of feigning do we consider such troubles, but in their connection with homicide. Upon many occasions persons have been arrested and convicted for causing the death of another, though upon inquiry it appears that the injury inflicted was insufficient to have caused the death of the supposed victim. Numerous examples are referred to, where in a brawl or in a simple assault, a man drops dead after having been lightly pushed or struck. It then becomes our duty to determine the degree of responsibility of the indicted person, and we shall seriously neglect our duty if we do not insist upon a post-mortem examination of the body of the deceased. We may then find the evidences not only of cerebral disease, but of pulmonary, cardiac, and vascular troubles as well.

Head Injuries in Children.—Christison refers to the interesting case of a woman who had lost several children within a period of a few years, and no reasonable cause could be assigned for their deaths. These children were all under fourteen, and their demise was followed by a sickness attended by headache, vomiting and other mischief. A medical investigation disclosed the fact that there were evidences of cerebral hypertrophy, which was probably the cause of the death of all the children. In this case the woman was arrested upon suspicion. I have myself known of examples where the same medico-legal point might have arisen, where in a phthisical family several children died within a comparatively short time of tubercular meningitis of a speedily fatal character, and where the question of criminal intent, under certain circumstances, might have very reasonably arisen.

Head injuries in children may develop in scrofulous subjects, a condition resembling tubercular meningitis, but we must be on our guard in such cases to throw out the possibility of the disease occurring without such a cause; and be able to determine the existence of hereditary neurotic taint. Blows and falls often

precipitate the disease in the children of tuberculous parents. Blows upon the back of the head are especially apt to produce tubercular meningitis, the symptoms of which—sub-occipital headache, hallucinations, staggering gait with a tendency to fall backwards, retraction of the head, ocular symptoms, delirium, coma, and death, are suggestive.

Changes in the display of mental disturbances occur as a result of varying pathological processes. An exacerbation of excitement follows a temporary vascular change, or a short lived inflammatory process.

Complication with Other Diseases.—Cranial injuries have been reported as occurring in phthisical patients who have died from the original disease within a short time after the injury, and in one case the man was beaten about the head and chest, and there was slight hemorrhage at the time. He died ten months after the blow upon the head.

A most recent case, which illustrates the possibility that cerebellar symptoms following a blow may be due to some pre-existing disease, which perhaps the violence has developed, is that reported by Dr. Fraser.*

The patient was a man who had received a fracture of the parietal bone by a brick that had fallen from a great height. He was at first insensible, but was able in the course of three weeks to return to his work. He suffered, however, from occipital headache of a severe character, and during the next fifteen months was deaf, and with this there was some amblyopia and a variety of symptoms suggestive of mental enfeeblement. He was stupid, of slow thought, and greatly depressed. A few months later his gait became ataxic, he had an inclination to fall backwards, and he presented the "circus movements" described by some authors as suggestive of cerebellar disease. In addition, there was double optic neuritis, with vertigo and vomiting, and difficulties in co-ordination. Subsequent examination revealed the existence of well marked syphilitic indications, such as nodes, eruptions, and cicatrices, and it was determined to try the effect of specific treatment. Under the use of large doses of iodide of potassium his troubles diminished in severity, and he rapidly revovered. In this case it is very probable that the blow was an exciting cause of cerebral syphilis. Although the situation is not favorable for a *contrecoup* that would give rise to cerebral disease, it is possi-

* *London Lancet*, May 12, 1883.

ble that a diffused meningeal inflammation and deposit of gummatous matter took place as an extending lesion, and had the case given rise to medico-legal complications the question of limited criminality might justly have been urged.

Otitis in Cranial Injuries.—In certain cases of aural disease a slight injury may precipitate death. Cases of otitis media have been reported in which the aural discharge had ceased after the person had either been struck with the fist or had received some equally trivial injury. In one such case a patient died comatose within one month after an injury and a cranial abscess was found which undoubtedly resulted from the disease of the ear. In this case the patient was struck in the chest and, in attempting to resent the injury, hit his head against a door.

Brain Abscesses.—The tendency of severe brain injuries may be to the formation of an abscess, which may burst into the ventricles, and be discharged through the ear, as occurred in Mr. Hawkins' case, where there was a copious discharge a few weeks after a head injury. Many injuries giving rise to head symptoms are quite likely to cause a variety of inflammatory action, in which there is extensive accumulation of serum, which distends the ventricles and infiltrates all the cranial tissues. Abercrombie reports cases, which show that the symptoms appear gradually with a slow formation of effusion, but that sometimes the latter may be very rapid and the symptoms correspondingly prompt in their expression.

Alcoholism in Cranial Injuries.—The patient's previous habits may aggravate an injury which in a healthy man would produce little or no mischief. Cases are reported where in a drunken state a person has received a slight head injury which was followed by death and yet no cerebral lesions directly due to the wound were found. Sir Charles Bell reports such a case, the victim being a woman of bad habits who while being remonstrated with by her husband, a good-tempered, industrious man, suddenly died from a cerebral hemorrhage. The husband struck her in the struggle, but not a blow of any force, and after death no scar or superficial extravasation was found. Bell testified that the condition of intoxication and the general diseased state of the vessels predisposed to the rupture, and that the blow was the exciting cause. The prisoner was acquitted.

Beck in commenting upon the above case, says: "It may,

however, be urged that the tendency of the remarks in the text is to exonerate all and every one from the consequences of injuries inflicted on the intemperate. Not so, if these injuries are recent, and if they cannot be confounded with the effects of natural disease, they are to be estimated like all other wounds. Severe blows, followed rapidly by convulsions, coma and death, and exhibiting on dissection effusion of blood upon the brain without any other disease of that part, present a very conclusive case of the effects of violence."

It may sometimes be necessary to distinguish the state of unconsciousness that results from concussion and drunkenness. This is sometimes an extremely difficult matter, for alcoholism as well as concussion may be followed by secondary results. Great care should be taken to investigate the patient's behavior and condition previous to the supposed accident, the presence of the fumes of alcohol and the manner of the injury. If death has taken place, alcohol may be found in the stomach. In some cases it may be well to examine the urine by the bichromate of potassium test, and if death has ensued, we may look for the appearance of renal and hepatic degeneration as well as for diseased cerebral vessels and meninges.

When the patient has received an injury when intoxicated the question may be extremely difficult to decide.

The Complication of Erysipelas.—The complication of erysipelas is one that is of some interest when it occurs in persons who have received head injuries. In one such case, that of a woman who had been struck with a smoothing iron and who afterwards disregarded her injury and drank to excess, a fatal attack of erysipelas occurred. It was shown that the wound which simply involved the scalp at first, had taken on a violent inflammatory action which resulted in perforation ; that she was able to go about for over a month, attending balls and indulging in her trade—that of a prostitute—and that her erysipelas and not her wound was the cause of her death. It was further shown that at the time there was an epidemic of erysipelas in Edinburgh. The prisoner was found guilty simply of assault.

* Dr. Dunlop, who reported the case, calls attention to the fact that no evidence to prove the exact date of the commencement of the erysipelas was to be had. It was unfortunate, for

* *Edinburg Med. and Surg. Journal*, vol. 21, p. 488, and Beck's Medical Jurisprudence, vol. 2, p. 305.

it might have shown whether the erysipelas began in the wound as it always does in the traumatic variety, or elsewhere, as is usually the case in the idiopathic form.

Trivial Blows and their Occasional Results.—Cases are reported where a very trivial injury has given rise to grave head symptoms. Falls from inconsiderable heights, from a chair or some slight elevation, have resulted in fracture of the base of the skull. Casper speaks of a woman who fell in a cupboard and a fracture of the petrous portion of the right temporal bone was the result. In old persons such accidents are by no means uncommon and care should be taken in medico-legal cases not to confuse them with cerebral hemorrhage or other conditions.

Unconsciousness without Apparent Marks.—It occasionally happens that a person is found unconscious after an assault and no external mark of injury is discovered. The patient may subsequently die and post-mortem examination reveals a fracture of the skull with extravasation. It is highly probable in such cases that what is known as a sandclub is used—a bag made of some cloth or cotton stuff and filled with sand. This suspicion is increased by the presence of ecchymosis beneath the site of the blow and fracture at the base, for the violence is transmitted in most cases by *contrecoup*.

As an illustration of how trivial head injuries may sometimes have a fatal terminatiou, I may refer to the case reported by Mr. Ashmun,* in which a small stone was thrown, striking a man upon the side of his head and causing death in ten minutes. "There was no external bruise and no fracture. The cranium was found to be extremely thin, and the ventricles were filled with coagulated blood, and the pia mater and vessels of the brain were gorged with blood." The dura was healthy. The verdict was manslaughter, which Ashmun thought was too severe.

I may refer in this connection to a case reported by O'Halloran, of a man who received a blow upon the head with a cudgel, which left some headache and fullness, but there was nothing else for many months, when an elevation appeared at the seat of the injury, of considerable size, and when this was opened there was found beneath an aperture in the cranium the size of a half crown, and beneath, the dura mater was found covered with pus, and this part subsequently became the seat of

* American Jurist, vol. 15, p. 108.

a fungous growth. Numerous cases of this kind are detailed by Abernethy, Norris and others, in which a serious injury was masked by a premature closure of the wound, and the real condition of affairs was not discovered until later.

Howship refers to the case of a boy who received a blow on the head with a ruler, which was followed by a small discharging sore that healed at the end of six years. Then the boy's sight was impaired and he manifested epilepsy. After his death, which resulted from trephining, evidences of chronic inflammation of the brain and its membranes were discovered beneath the point of injury. Abernethy, in referring to these cases, states that very often the disease is confined to the inner table and extends inwards, producing cerebral disease.

Taylor relates some cases where boys who had had their ears boxed, and where no undue violence had been used, died shortly afterwards. The case of "Regina *vs.* Hopley" is one of these. The boy's stupidity, which was the result of disease, affected intellectual development. He presented no unusual symptoms of critical disease up to the time the flogging was administered, but three years after the punishment he died. Taylor also refers to the case of a boy who received two slight blows on the face. He went to his work the next day, but complained of pain in his head, which increased so that two days afterwards he was obliged to give up everything and take to his bed. His condition became worse and death followed in fourteen days. At the post mortem the only morbid appearance found was a small tumor in the dura mater over the posterior face of the petrous portion of the right temporal bone. It was held by those who made the examination, that the boy's death had not resulted from the violence, that the tumor was of long growth ; and that some time before the injury he had complained of pain in his head, and that the slight violence could hardly have affected this deep-seated lesion.

A case may be cited of a man who was struck upon the face with the palm of the hand without the production of local effects. Within a few days he complained of very severe pain in his head and at the end of the thirteenth day he sought medical aid. The following day he became much worse and died rather suddenly. No signs that could be traced to the accident were found at the autopsy, but attached to the petrous portion of the temporal bone was found a small tumor the size of a hazelnut. It afterwards transpired that the man had complained of pain for over a year.

Head Injury as the Result of a Fall upon the Feet.—In very rare cases a fall upon the feet has been known to produce a fracture at the base, and this was the cause of the death of the Duke of Orleans.

Blows with the Fist.—Blows with the fist produce ecchymosis, wounds if produced are small and rarely divide the skin in a clean cut manner and are not usually followed by very grave cerebral conditions, excepting, perhaps, when the blow is inflicted behind the ear.

Considerable care must be exercised in examining the heads of persons who have received blows, and the appearance of the swelling and ecchymosis must be closely investigated. Collections of blood beneath the scalp are always taken for graver injuries, and there may be a depression in the center, which in many instances has deceived the physician who imagined it to be a fracture of the skull. Harrison cautions the observer against mistaking the throbbing of the lump, which may be after all transmitted, for that of the pulsation of the brain, which does not exist. These points are important to remember in courts of law, where the testimony of a medical witness is to the effect that there was a fracture of the skull, and his evidence, which is perhaps the result of an erroneous conclusion, should be carefully sifted. There are numerous cases of death from concussion, where there is neither fracture of the skull, effusion of blood, nor any observable injury. A number of these cases are reported by the older writers, where a blow by the fist has been the cause of almost immediate death, where there has been nothing to account for the same, except the violence itself. Case of this kind is reported by Harrison. "George Macclish and John Macvey were tried in Glasgow, on the 29th of December, 1831, for the assault and murder of William Carlyle, on the September preceding. Carlyle and a friend, while on their way home late at night, were met by seven or eight men standing at the corner of a street who accosted them. A quarrel was the result, when Macclish struck Green, the friend of Carlyle, knocking him down, when he arose and was again knocked down by Macvey. When he recovered he looked about for Carlyle, who also had been knocked down by Macclish, and he was found dead. Carlyle's head contained a considerable effusion of blood beneath the skull, with extravasation of blood on the brain. In this case the medical witnesses were unable to agree whether the blows or falls were the cause of death, and there being no proof of malice the prisoners

were acquitted of murder, but were found guilty of culpable homicide and were sentenced to fourteen years' imprisonment. Numerous cases of death of this kind, the subjects being prize fighters, have from time to time been brought forward, and in many instances death had followed blows upon the ear and at the back part of the head. In fact it may be said that in these instances an inconsiderable amount of violence is likely to be followed by a fatal result.

Rare cases have been reported, in which there has been atrophy and absorption of bone, without any destruction of the integuments, as the result of a fall. Such a case is detailed by Howship, in which the right parietal bone was injured, but there was no external wound. Some weeks subsequently, however, the pulsation of the brain could be perceived at the point of injury, and the child became paralytic.

Prognosis of Cranial Injuries.—The prognosis of cranial injuries is very uncertain ; forms in which fracture is produced are extremely unfavorable, and the presence of symptoms of meningitis, or purulent encephalitis are equally bad. The duration of the primary unconsciousness has much to do with the subsequent improvement or the reverse, and the symptoms of compression are especially of serious import. The nature of blow should be taken into account—whether it is made by a dull heavy instrument or by one with a sharp-cutting edge—and in the latter case if there is no fracture the patient's chances are better. Blows upon the vertex or over the ear are bad and in the latter case an otitis with subsequent cerebral symptoms may follow.

Patients may receive comparatively serious accidents and yet be immediately able to seek assistance. A case is mentioned of a laborer who was struck upon the head with a pick-ax, the point entering the brain to the depth of the left lateral ventricle,—yet he walked a mile and a half to the hospital.

We cannot always say that such and such an injury is necessarily fatal, for there are important exceptional cases where extensive destruction of tissue has taken place without apparently shortening the life of the individual, and there are numerous cases where bullets and other missiles have become encysted. I know of a distinguished judge who carries in his brain to this day, a bullet which penetrated the cranium during the civil war, and *Elliot reports the case where a bullet remained in the brain for sixty-five years ! The patient in

* *Edinburg Med. and Surgical Journal*, Dec. 1880.

this case was a man who was shot in the eye, the bullet lodging probably in the occipital lobe.

In some of these cases in which the patient temporarily survives the accident, the prisoner may be convicted simply of assault, and when death does occur, it is often supposed to be from other causes.

Contusions and their Results.—The consequences of contusions of the scalp have been sometimes severe, and, as I have mentioned, not only may epilepsy follow such injuries, but we often find cases of trigeminal neuralgia of an extraordinarily severe character arising subsequent to a blow upon the head and superficial wounding. It has been shown by the statistics in the Medical and Surgical History of the War of the Rebellion, that contusions of the scalp as produced by projectiles are quite likely to be followed by the most serious consequences and severe intra-cranial trouble. When the cranial bones are subjected to violence, we may find that a slight blow, not sufficient to cause fracture, may sometimes give rise to such injury that necrosis of the part follows, and exfoliation and discharge of bones takes place after some time. Of course the force exhibited may produce death of the external table of the skull alone, or of the internal as well. The local pain that sometimes exists for a long time after an injury need not be meningeal in character, but may symptomatize an inflammation of the cranial bones which are beneath the seat of contusion. We find in such cases that there is usually some thickness or hypertrophy beneath the cicatrix, and that slight pressure may cause a great deal of suffering. Under certain circumstances we find that the diploë may be the seat of inflammation as the result of head injury ; in such cases the symptoms are insidious in their development, and we are apt to find meningitis and serious trouble.

The Prognosis of Traumatic Inflammation.—Injuries followed by inflammation of the brain give rise to pronounced symptoms which rarely appear before a week at least. Yet if there is a conspicuous rise of temperature serious mischief may be expected, it is therefore safe for the medical man to be exceedingly careful lest he may say that because the blow is not immediately followed by bad symptoms, that the injury is not a serious one, or that the secondary condition is purely the result of the patient's carelessness, or that it is due to another cause.

In advanced cases we are are to give a very guarded prognosis, but there are cases in which there can be little doubt as to the progress and termination of the symptoms. When, for instance, there is a well-developed series of progressive symptoms indicative of structural degeneration, consisting, perhaps, of paralysis with contractions and increased tendinous reflexes, optic neuritis with choked disc, convulsions, tremor increased with voluntary effort, mental impairment with loss of memory, the case is likely to terminate fatally in a comparatively short time.

An interesting point is the possible distinction between traumatic inflammation of different kinds. Holmes considers this matter very fully, and does not believe that, for instance, in the one case it can be said that the brain is alone affected, and in another that the membranes are. We are to be guided largely by the time of appearance of such symptoms as evidence of the injury. Holmes points out that inflammatory symptoms are apt to be of very early development after fracture, within a few hours or a few days; while with contusion several days are apt to elapse before the inflammatory symptoms make their appearance; and in cases of another kind, where there has been trouble, it may often be several weeks after the subsidence of light symptoms before the expressions of grave cranial trouble are presented. So far for the probable kind of injury.

As to localization the matter is perhaps more difficult. For we have to deal with pathological processes, which are often extensive and advancing.

Head Injuries and Pyemia.—Head injury may be followed by pyemia, and this is the case more often in slight traumatisms where perhaps the only trouble may be a scalp wound or contusion. In 328 cases reported in the "Medical and Surgical History of the Rebellion" of contusions as the result of gunshot, the head being the seat of injury, but one case of pyemia was reported, which shows the complication is not so frequent a one as where other parts of the body are wounded. The location of extravasations of blood in the cranial cavity, but more often beneath the arachnoid, vary greatly. The symptoms are usually those of compression, and if the collections be not too great we may find, as the brain accommodates itself to pressure, that there is a remission. Sometimes this lightening up of the trouble may follow the use of the trephine; or, as in the case reported by Holmes, the escape of

blood from a vessel in the neighborhood. "In the year 1859 a man was struck with a spade, just over the anterior inferior angle of the right parietal; and when he came to St. George's Hospital a few minutes afterwards, a compound fracture, with depression of a small piece of the skull, was detected. But there was no cerebral symptom whatsoever. Shortly afterwards, however, the patient became heavy and stupid; and coma was gradually supervening, when Mr. Kidd arrived, and at once proceeded to remove the depressed bone, whereupon a jet of blood spurted out from a large branch of the meningeal artery, and all the symptoms of compression were immediately relieved."

The Nature of Extravasations.—The nature of the collection of effused blood which is found extravasated in the cranial cavity is to be determined with regard to the time of the injury. Blood when recently poured out is bright and clotted, and at a later stage is darker and more firm, after two weeks it becomes yellow, and later on a well organized fibrinous mass remains.

Influence of Head Injuries upon Previously Existing Mental Disease.—It not infrequently happens that a blow upon the head will in individuals of weak mind, or in those who have suffered for years from some form of disease, produce a sudden improvement or restoration.

Sir Astley Cooper tells of a sailor who remained in a stupid state after a cranial injury for fully a year, and was then suddenly restored by the operation of trephining. Cases of this kind have a dramatic significance which has led novelists and playwrights to make use of them. The books contain instances of persons suddenly deprived of consciousness in the midst of a pursuit, and some time after taking up the thread of thought after sudden restoration.

Abercrombie tells of a lady who had an apoplectic attack in the midst of a game of cards. The first words she uttered after she recovered her consciousness some days later were "What is trumps?"

In such cases there is a prolonged compression of the brain and in medico-legal cases the question of curability arises—whether or not proper surgical treatment might effect a cure. Pritchard relates the case of three idiot brothers. One received a blow upon the head and afterwards seemed to undergo a very decided change for the better in his mental condition, and ultimately became a clever barrister, while

his brothers remained imbecile. Cases of insanity have been caused by blows upon the head, and the same thing is true with epilepsy.

Affections of Speech as the Result of Head Injuries.—Affections of speech as a result of head injuries are common enough. Dr. Hoy,* of Racine, Wisconsin, reports three interesting cases, in the first of which a fracture of the skull occupying the anterior superior angle of the left parietal bone existed. The immediate insensibility disappeared after the use of the trephine, but returned a few days afterwards and was due undoubtedly to the pressure of retained blood, and this was verified by the removal of the stitches, when the patient's mind again became clear. The doctor found that by making pressure with his thumb over the opening he could at will temporarily suspend the faculty of speech.

The third case was that "of a man living in Vermont who was standing near his mill bantering with his son about shooting a kingfisher that was perched on a dry snag that was projected from the water in the pond. The son fired, and the rifle-ball, a small one, missed the bird, ricochetted and struck the father near the middle of the forehead. He dropped instantly, and for a long time it was thought impossible for him to recover; but time wore on, and he still lived, a mere animal, incapable of speech, for fifteen years, at which time there appeared a slight elevation of the skull at the crown of the head. Dr. Mussy was called and trephined the spot, when he was enabled to remove the flattened ball that had remained so long within the skull In a few minutes the old man called out, "Zeke, you dog, you missed it!" "Missed what?" asked the doctor. "Why, the kingfisher!" This was the first word spoken since the accident, and he could not understand that the report of the rifle was not still reverberating over the water at that moment. Zeke was married, had a family and was living in the West. The father had grown gray, and all was changed. A Rip Van Winkle in reality."

Insanity during litigation.—It occasionally happens that the plaintiff in a suit for damages for physical injury may subsequently become insane. Such a case (Martin vs. Penn. R. R. Co.) in which I appeared as medical witness, was tried a few months ago.—

The plaintiff was injured in a collision between two steam-

* *Journal of Mental and Nervous Diseases*, New Series, vol. ii., p. 2.

boats and was wedged between the seats in the cabin of the ferry boat in which he was at the time. His momentary injuries were seemingly trivial the most severe of which was a blow upon the head, but his sufferings later were very great. A few months after the accident he became morose, nervous, indifferent, and violent towards his family, and finally it was found necessary to confine him in an asylum for the insane. In the meantime his suit was tried and he was brought into court. His behavior upon the witness stand and during his private examination was strikingly suggestive. He claimed that the motions of his counsel were improper and that he did not need damages. He also had the most magnificent schemes and ideas of his wealth and the delusion that he was in personal communication with God. In this case the question arose, whether an insane man was competent to bring a suit. The appeal was decided in his favor and the matter was compromised.

CASE LVI.—RAILWAY INJURY.—RELEASE OF DEFENDANTS DISPUTED ON GROUND OF INSANITY OF PLAINTIFF.—CONTRACT DECLARED VALID, PLAINTIFF BEING CONSIDERED RESPONSIBLE AT TIME IT WAS MADE.

George *vs.* St. L. M. & S. Ry Co., } 34 Arkansas Reports 613.

On Nov. 17, 1876 plaintiff while riding as a regular passenger on a train of the defendants, traveling from Little Rock to Texarkana was injured severely on the head in an accident to said train, which injury caused him great pain. On Nov. 29, 1876, while still suffering from said injury, he, in consideration of the sum of $100 signed a release to the defendant company for all damages caused by said injury, but when he recovered from the effects of the injury and was informed by his wife that he had signed a receipt he had no recollection of it and went to the agent of the company to see the receipt, but his request was refused. He made no offer to return the $100 but claimed that he never received it, that he had no recollection of signing the release. On the trial the attending physician testified that his injury consisted of a severe scalp wound ; that his mind was clear on Nov. 29 ; and witnesses of the transaction testified, that, though plaintiff was confined to his bed when he signed the release he seemed to know what he was doing,

that he appeared to be perfectly sane ; that there were several members of his family present ; that an offer of $60 was made to him, but he refused to take less than $100. On the other hand the keeper of the hotel to which plaintiff was brought after the accident testified that plaintiff was confined to his room until January 6, 1877 ; that he saw plaintiff daily until December 6, 1876 ; that sometimes he seemed rational and sometimes he talked at random and flighty. Under a charge that it was plaintiff's duty to offer to return the money if he wished to repudiate the contract the jury found for defendant.

On appeal to the Supreme Court the judgment was reversed and the case remanded for trial on the ground that if plaintiff was insane when he signed the release, it was a question for the jury whether he was in ignorance of the existence of the release when he brought suit.

Watson* says:—"In criminal trials for the infliction of injuries upon the head, in which the injured individual is able to be a witness, it is obvious from the disordered state of the intellectual faculties, and particularly of memory, arising from concussion, that his evidence should be taken with extreme caution in regard to circumstances which happened at the time of the injury and indeed it should only be received in so far as it is coroborated by other testimony."

Post-Mortem Determination of Suicide or Homicide.—It is a matter of importance to determine whether the fractures of the skull which are found are the result of violence inflicted during life or afterwards ; and very often this is an important element in fixing the guilt or innocence of the suspected person. Casper, who has conducted a number of experiments on dead bodies, found that it was a very difficult matter to produce fracture of the skull by ordinary blows and that only powerful blows were followed by fissures in the occipital, or parietal, or "more frequently in the squamous portion of the temporal bone. The dead scalp seems to have considerably more power of resistance than the living one, and after its removal fissures of the bones are more easily produced by similar blows."

It is to be determined sometimes, whether the evidence of fracture of the skull that may be found in human remains are ante- or post-mortem, or if the latter, how produced. Dr. S. E. Stone † presented to the Norfolk District Medical Society

* *Edinburgh Med. & Surg. Journal*, vol. 52, p. 109.

† *Boston Med. & Surg. Journal*, Dec. 26, 1876.

a skull presenting a well-marked fracture at the base. The skull belonged to a skeleton which was found near a brook in Walpole. It was prone and partially concealed beneath a hedge, the right arm was raised in advance of the head which pointed to the brook. "The left arm lay under and across the body. The right leg was extended, and the left flexed beneath it. No part of the skeleton was below the level of the ground and no stone or other hard substance could be found, with which the body could have come in contact in falling in such a manner as to produce the fracture. The clothing, with the exception of the feet, upon one of which was found a shoe and stocking, and upon the other a stocking only. The other shoe was found near the head, while the clothing lay mostly beneath the body. But little flesh was left upon the bones, and this was converted into adipocire. The locality where the skeleton was found was a most unfrequented spot, known to but few persons. The fracture extended from a point an inch to the left of the occipital protuberance, in a nearly straight line to the posterior condyloid foramen, and then at an oblique angle forward to the outer edge of the posterior foramen lacerum."

Fig. 9.

The questions to be decided were whether the fracture had resulted from the expansion caused by the freezing of water which had accumulated in the skull after the disappearance of soft parts, or whether it had been produced by violence before death. Dr. Stone believed in the latter theory, holding that if water had frozen, the expansion would have been exerted upon all sides and separation of the bone at the sutures

would have taken place instead of the fracture of a strong bone. The position of the body favored the former theory however.

Orbital Wounds.—Several cases of orbital injuries with fatal results are reported by Orfila, Beck, and Smith. McClane the actor, was tried for the murder of another actor by thrusting his stick at him, the point of which entered the orbit. Such injuries, as I have said, in exceptional cases may not be followed at once by death. A patient I saw in consultation with Dr. Noyes of this city was a man who had been wounded while hunting, and it was some weeks before the serious nature of his orbital wound was fully recognized, when upon examination a long piece of iron from the stock of the gun, four or five inches in length, was found to have entered the orbital cavity, and was imbedded in the right frontal lobe. This patient lived for several months after the explosion of his gun.

Prognosis in Relation to Degree of Skull Injury.* —Dr. Ashurst presents two cases of compound fracture of the skull in children, which shows that "the amount of damage done to the brain is apt to be inversely proportionate to that inflicted upon the skull. In one of the cases a little girl was injured by a heavy body falling from a great distance with great momentum, the separation and removal of a large portion of bone, the occurrence only of "cerebral irritation," the force of the blow being expended upon the skull, and in this case the patient's convalescence was uninterupted and her recovery was attended by no cerebral impairment. The second case in which the injury was slight, the blow having been inflicted with a shovel, presented but a very slight fracture. Dr. Ashurst says: "There were at first absolutely no symptoms of intra-cranial lesion; and when the occurrence of suppuration between the inner and outer tables at the seat of fracture gave rise to convulsions, and required the application of the trephine, the membranes of the brain were found entirely intact, and with the elevation of the depressed portion of bone the convulsions instantly and definitively ceased. Yet, at the moment of injury, the skull measurably resisting the force of the blow, its effects were transmitted indirectly (by the *contrecoup* or "counter-stroke" of the older writers) to the substance of the cerebrum itself, where at a very considerable depth some slight laceration or contusion of the brain-substance occurred,—lacera-

* *Philadelphia Medical Times*, Dec. 23, 1866, p. 123.

tion so slight as to give no sign of its presence until several weeks afterwards, and yet sufficient to prove the starting-point of the large abscess which ultimately brought the case to a fatal termination."

Bullet Wounds and their Results.—The occurrence of brain symptoms after the receipt of bullet wounds of the head may not be immediate, on the contrary, several weeks or a much longer time may ensue before cerebral mischief follows. I know of a man who attempted suicide by firing four small Smith and Wesson balls into the head—one just above the right ear, another above this, and two through the frontal bone. The patient appeared very comfortable, ate, slept, and talked rationally until the twenty-eighth day, when a rise of temperature followed by headache, delirium, and coma took place, and he died one week later. Taylor speaks of a child who was accidentally injured by a pistol shot, which traversed both hemispheres. No symptoms manifested themselves for twenty-six days, and the child died on the twenty-ninth day.

Hernia Cerebri in Relation to Prognosis.—I was called several years ago to see a child, who while playing in a closet, dislodged a large pistol, which exploded. The ball entered the forehead, shattering the frontal bones, and as a result there was an extensive hernia cerebri. If was not until two weeks afterwards that cerebral symptoms manifested themselves, and the patient died a few days subsequently.

Dr. Bush's Case of Pistol Wound of Brain with Recovery.—Dr. Bush, of Boston, records an interesting case of a patient who recovered after a pistol wound of the head.

"G. B., a stout German lad, sixteen years old, weighing one hundred and sixty pounds, had always been well, previous to receiving the injury about to be described.

"On June 29th, while playing with a younger companion,* the patient was shot in the head, and immediately fell to the ground insensible. He was lying upon a sofa, breathing heavily, with a slow pulse, the mouth drawn to the left, and the left arm and leg paralyzed. It was with difficulty that he could be roused.

"Upon examination a small round wound, with inverted edges, was found in the forehead, over the center of the right

* *Boston Med. and Surgical Journal*, Jan. 12, 1882, p. 29.

eye and an inch above the eyebrow. Blood was oozing from the wound. Without the use of force, simply by its own weight, a probe passed into the wound, penetrated backwards to the depth of two inches. The opening in the skin was then enlarged so as to admit the tip of the little finger, and with this a circular hole could be felt in the skull. * * *

"Two hours after the receipt of the injury he became perfectly unconscious, and could not be roused. Both pupils were dilated, the right fixed, the left responding to light, and later there was vomiting. * * * Cerebral substance in masses as large as a split pea were noticed coming away with the blood. Upon examining the opening in the skull with a probe, small particles of lead were removed.

"The next day, June 30th, the pulse was 90, the temperature 101.2° F., the tongue coated, and the mind sluggish, but he would respond when spoken to. He complained of pain in the head, which was intensified by motion. Vomiting occurred at intervals. The right pupil was largely dilated and did not respond to light. He stated that he could not see out of his right eye. Ten grains of bromide of potassium were given every three hours. * * *

"On July 3d there was a sero-purulent discharge from the wound, the pulse was 100, the temperature was 102.4° F., and the pain in the head was increasing. The wound was œdematous and its mouth was covered by a slough.

"On July 5th, one week from the time he was shot, the headache was of periodic character, and was only noticed over the right side of the forehead. With the right eye he could now just distinguish objects, but could not see clearly, things appearing as if seen through a mist. * * *

"On July 8th sight in the right eye was perfect, the headache was slight and local.

"On July 10th the seat of the cephalalgia changed from the from the front to the back part of the head.

"I have previously stated there was hemiplegia; there was loss of both motion and sensation, and the skin of this side was colder than the other. Upon tickling the sole of the left foot the right leg would be drawn up. He also experienced spasmodic pain from left hip to the heel, and was able to move the leg for the first time since the receipt of the injury. The right pupil was still not so sensitive to light as the left, and the mouth not so much drawn o the left as before. It was forty-one days from the time of the accident before he could move his arm, and up to this time he could not sit up in bed without

experiencing nausea, or feeling as if "something was rolling about in his head." * * *

"Now, four months after the injury, he has no cerebral symptoms, the paralysis has disappeared, save in the flexors and extensors of the hand, but there is yet little strength in the muscles of the arm and leg, so that he cannot walk far, for fear of falling; he creeps about the floor, and even goes up and down-stairs on his hands and knees. He can walk when any one supports him." *

Prognosis of Penetrating Wounds of Skull.— Dr. Wharton,† of Philadelphia, presented recently an analysis of 316 cases in which foreign bodies were lodged in the brain. The following figures are interesting:

Recovered	160	Cases
Died	156	"
The foreign body removed in	106	"
{ of these cases 34 died. }		
The foreign body was allowed to remain in	210	"
{ of these 122 died, }		
{ " 88 recovered. }		
The foreign body penetrated the frontal bone in	132	"
{ of these 58 died, }		
{ " 74 recovered. }		
The foreign body penetrated the parietal bone in	58	"
{ of these 27 died, }		
{ " 31 recovered. }		
The occipital bone penetrated in	23	"
{ of these 16 died, }		
{ " 7 recovered. }		
The foreign body entered the temporal bone in	31	"
{ of these 12 died, }		
{ " 19 recovered. }		

Wounds of the orbit were most fatal.

* Seven months after the receipt of injury, the patient had perfect use of both the arm and the leg of the side which was affected. He could walk without any support, and had complete control of the muscles of the arm and hand.

† *Phila. Medical Times*, July 19, 1879, p. 493.

The statistics of the Medical and Surgical History of the Rebellion show, that of 186 cases of penetrating wounds of the cranium, 101 died, and it is further shown that in the 85 cases where the intruding body was removed 43 recovered. When the balls remained in the head there is the history of epilepsy and other cerebral symptoms, paralysis, head pain; and in but four of 19 cases no bad results ensued.

Gross* has presented figures showing the mortality from gunshot wounds of the skull and proves that by proper surgical treatment the larger proportion recover.

"Of 224 depressed gunshot fractures of the skull, and in 90 operative measures, of these 45 or 50 per cent. died. Of 134 instances, on the other hand, in which the treatment was purely conservative and antiphlogistic, and in 43 of which the signs of compression were very doubtful, 61 recovered, and 73, or 54.47 per cent. died; or if the doubtful cases, which resulted in 10 deaths, be excluded, 91 cases of compression from depressed fractures, treated expectantly, afford 63 deaths, or a mortality of 69.23 per cent., a result in favor of operation by 19 per cent."

In murder cases this matter frequently arises in connection with the question of whether or not the patient received proper treatment after the injury. Of course, with the best treatment fatal results are extremely probable, and each case differs.

Possible Method of Infliction.—In cases of murder it is important to know in what manner the injury has been inflicted, the weapon used; and it is often extremely difficult to arrive at the true statement of facts. Casper refers to the case of a child who was found dead in a thicket. The mother was an unnatural one, and it transpired that she maltreated it upon every occasion and fed it upon potato parings and other refuse. She frequently punished it, and one witness testified that the child had been badly beaten the night before its death. The woman seized the child and knocked its bare head four or five times upon the floor, and hurled it into the middle of the room. The mother testified that she gave the child a "few slaps," that it began to whimper and groan, that she had placed it in bed where it slept quietly, and finally died in about an hour and a half. She put the child in a basket, and left the house, telling her husband on her return without the child, that she had left it at a friend's house. She took with her a

* *American Journal of Medical Science*, July 1873.

"potato grubber" to lead people to suppose she was going to dig potatoes. At the autopsy sixty-two ecchymoses were found upon the child's head, and a stellate fracture of the occipital bone extending to the foramen magnum was found; as well as a fissure of the right parietal bone, hyperemia of the brain and an extravasation of blood at the base. The statement of the woman that she had given the child only one slap on the side of the head was disbelieved at once, because of the existence of the extensive fractures, and the inference was that some blunt instrument had been used. The inquiry in this case was, whether the cause of death was from the violent mauling of the child and pounding it had received, or whether the potato grubber had been used, and, although it was conceded that the parietal fracture might have been thus produced, it transpired that the child, after the mother's ill-treatment referred to above, sat up and showed signs of intelligence for some time; it was the use of the "potato grubber" that resulted in the more serious fracture of the occipital bone and the death of the child.

The Character of the Wound.—Macewen,* has written an interesting paper upon the relation of wounds to the instruments inflicting them, and as his remarks are applicable to head wounds as well as others, I present his conclusions:

"1. Blunt instruments sometimes produce scalp wounds having straight outlines and sharp clean edges, which in these respects could not be distinguished from wounds produced by sharp-cutting instruments.

"2. Scalp wounds, which exhibit entire hair bulbs projecting from the surface of their sections, have been produced by a blunt instrument.

"3. Wounds, exhibiting nerve filaments or minute blood vessels bridging the interspace between the lips of the wound, toward the middle of the depth of the section, while the tissues have receded all round them below as well as above, have been produced by blunt non-penetrating instruments.

"4. When a wound, even with sharp well-defined margins, bears in contour a resemblance to an osseous ridge in close proximity, there is a *probability* that it was produced by a blunt instrument through forcible impact against the underlying osseous ridge.

"5. *Cut* hairs found in the immediate vicinity of a wound are

* *Glasgow Medical Journal*, Jan., 1879.

valuable aids in determining whether a sharp or a blunt instrument has been made use of.

"6. As to the diagnosis between wounds produced by instruments of the knife kind and other sharp-edged substances, such as glass, earthenware, etc., no dependence can be placed on the mere regularity of outline or sharpness of edge, or the reverse.

"7. Sharp clearly-defined wounds in certain cases present peculiarities in their terminations which may be sufficient to enable a probable diagnosis as to whether they were produced by a knife or a portion of glass or earthenware.

"8. The same instrument, used by the same person in delivering several successive blows, may produce wounds of different character."

Accidental Homicidal Injury.—It may be necessary in some cases to determine whether death results from a fatal wound, from an accidental fall, or by the patient being hurled against a wall. In a general row or disturbance it is often important to consider whether the individual was accidentally killed or maliciously struck upon the head by another. As Casper has shown, if most of the participants are drunk very little reliance is to be placed in their stories. In such cases we are to carefully determine the nature of the wound. If it is associated with others, it may or may not be the cause of death. The character of the fracture, and the evidence of violence are to be investigated. It may appear that the pathological appearances are too violent to have originated in an ordinary fall or *vice versâ*. The sharpness of the edge of the wound should be examined, and its shape in relation to objects that might have inflicted it. In cases where people are injured in brawls, I agree with Beck that it is always best to "lean towards the accused, unless the proof of malice is conclusive."

Civil Suits for Damages.—Medical men are called upon to express opinions and give testimony regarding personal examinations they may have made, not only in criminal questions, but in civil suits as well. In certain accident cases the claim is made that the plaintiff has received a blow upon the head which has given rise to permanent injury. Some times the cause of such injury is due to the fall of building material, at others the plaintiff has himself fallen from an insecure sidewalk, vehicle or elevator, and of course a suit for damages is the result. The injured person may present himself for ex-

amination, with a well marked history of nervous symptoms directly traceable to the blow or fall, or he may bear suggestive scars, or very often his unsupported story is all we have to guide us. It is not rare to find fraud and imposture. In one case I was called to examine a well-marked migraine, connected beyond doubt with menstrual irregularities, were said to be due to a head injury; in another the claim for excessive damages was made by a confirmed epileptic, whose disease had existed for years, and who insisted that his disease was received by and followed an accident.

Infanticide by Head Injury.—We are sometimes obliged to determine the significance of cranial injuries as the result of infanticide, and are to distinguish between cases where a child has been killed by its inhuman mother, and those where an accident shortly after birth has been the cause of death. It will not do to disregard the fact that fractures of the skull may occur during labor, as the result of the use of the forceps or of mechanical obstruction, the mother perhaps, having a deformed pelvis; but these are rare, and when they occur it is almost always possible to find the method of causation, either by examination or by the testimony of the physician. The victims of infanticide usually present other signs of violence than fractures, which differ from those that are produced, for instance, by the forceps, from the fact that they are attended by excessive laceration of the brain and other local injuries. Fractures produced by forceps are due primarily to defective ossification, and the anterior cranial bones are involved, while, as Ogston has pointed out, the occipital bone usually escapes. Two or three cases are presented by this author which are of interest. In one it was found that in addition to fractures of the parietal and frontal bone the sides of the head and face were flattened, and the marks of large shoe nails were visible on one cheek. The mother had killed her child by trampling it in the cow-house where it was born.

CHAPTER VIII.

SPINAL INJURIES.

General Anatomy of the Spinal Column.—The spinal column consists of a number of closely articulated bones beginning at the base of the skull and extending downwards, terminating in the coccyx. The bones are bound together by ligaments and muscles, and form a canal in which lie the spinal cord and its coverings. The bones of the spinal column are of five divisions—cervical, dorsal, lumbar, sacral and coccygeal. Those above being the cervical, seven in number; those next below being the dorsal, of which there are twelve, the next lowermost are the lumbar, of which there are five, while below are the sacrum and coccyx which in the adult are practically two bones. The vertebræ have peculiar characteristics, especially the cervical and lumbar, the latter being the largest, while the dorsal are comparatively small, but they increase in size from above downwards. The dorsal vertebræ, it will be remembered, furnish articulations for the ends of the ribs. At the posterior part of the spinal column will be found spinous processes more or less pronounced; that of the seventh cervical being known because of its great development as the *vertebra prominens*.

Ligamentous Attachments.—Laterally the vertebræ are provided with transverse processes which serve as points of attachment for ligaments, and in the dorsal region contain articulations for the tubercle of the corresponding rib. In the cervical region the two upper vertebræ are very important because of the duties they perform. The first or atlas supports the skull; it is divided by a transverse ligament into two segments, one receiving the odontoid process of the axis, and the posterior is filled by the spinal cord. The second cervical vertebra or axis articulates with the atlas by means of the odontoid process which projects upwards through the opening before described, and below with the next cervical vertebra by means of facets. All of the vertebræ are separated by discs of cartilage which are undoubtedly provided to prevent the transmission of shock. The spinal cord which is contained in the

spinal canal extends below as far as the first lumbar vertebra, and from it pass nerves to each side of the body to the extremities and trunk. In the cervical region a number of the nerves after leaving the cord join to form the brachial plexus which is formed by the juncture of the four lower cervical and the first dorsal nerves; these further divide up into three trunks which supply the shoulder and upper part of the chest and the arm and forearm. In the lumbar and sacral regions we find other great branches which supply the pelvic organs and the lower extremities.

Localization of Spinal Injuries.—A reference to the appended cut, which is taken from Gower's, will enable the reader to understand the nerve supply, and it will be recognized at a glance how the injury of a particular part of the spine may produce various alterations of function in remote parts.

Investing Membranes of the Cord.—The spinal cord is surrounded, as is the brain, by the pia mater, arachnoid and dura mater, and there is communication between the ventricular spaces of the brain and the arachnoid cavities in the spinal canal, so that the cerebro-spinal fluid may accumulate or be diminished in quantity under varying conditions. The dura mater is separated from the wall of the bony canal by areolar tissue and vascular plexuses, and contains perforations through which the spinal nerves pass on their exit to other parts of the body. Filaments pass to the cord from the arachnoid to keep it in its place. The nerve roots consist of two from each segment, an anterior and posterior, which go to form the main trunk. At the lower part of the cord the nerve roots descend almost vertically to pass out of the various foramina of the sacrum, while the cord ends in a bundle of filaments which compose the cauda equina.

Anatomy of the Spinal Cord.—At two important points in the cervical and lumbar region, we find enlargements of the cord which correspond to the emergence of important bundles of nerves going to the upper and lower extremities, while in the dorsal region the cord is of comparatively small size. The spinal cord consists of various bundles of fibres going to and coming from the brain, and a central collection of gray nervous substance which at its anterior part contains large cells, having a special motor and trophic function, while posteriorly there are prolongations of gray matter which

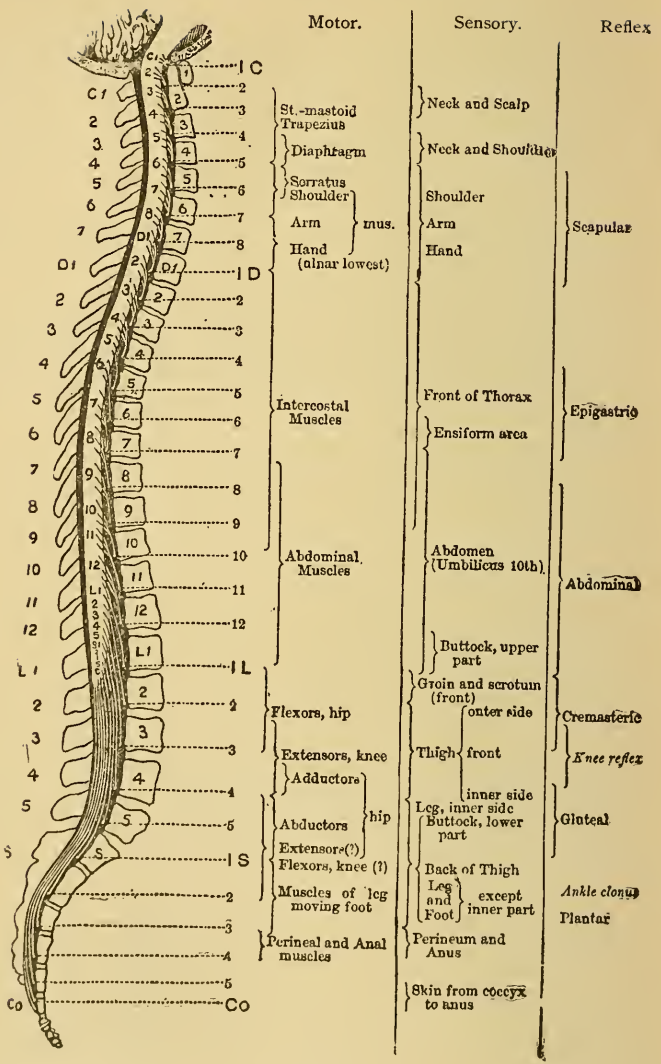

Fig. 10.
Scheme of Spinal Symptoms.
(Gower.)

play an equally important part of a sensory nature. The white matter which surrounds the central gray substance and is composed of nerve fibres is divided up into regions which have special functions, and these are designated as columns; and in each half of the spinal cord which is divided by an anterior and posterior fissure, we find an anterior column, a lateral column, and a posterior column. Roughly speaking we find that the two former are concerned in the transmission of motor impulses, while the latter are devoted to the conduction of sensory impulses. That the emergence of motor impulses takes place in the anterior nerve roots, and the conduction is efferent; while sensory impressions are carried *to* the cord by the posterior roots, and are further conducted by the posterior columns, and in the dorsal region by the lateral columns.

Pathologically considered, we find that disease of the anterior columns and the nerve cells of anterior gray matter, is followed by paralysis and muscular wasting; that disease of the lateral columns, by loss of power and by rigidity, contractions, and increased reflex excitability; and that degeneration of the posterior columns is manifested by sensory disturbances as anesthesia, pain; and loss of co-ordinating power. We also find that disease at different levels of the spinal cord gives rise to special symptoms dependent upon the involvement of various important nerves supplying particular organs. Thus disease of the cervical region is very likely to produce ocular difficulties, interference of the action of the diaphragm, paralysis of motion and sensation of the upper extremities and of the shoulder and neck; disease of the dorsal region produces more or less paralysis of motion and sensation, of the intercostal muscles and thoracic walls, so that difficulty of breathing results, and in the lumbar region we find paralysis of the lower extremities and of the bladder and bowels, with more or less disturbance of sensation, and with affections of the various reflexes of the lower extremities.

The medico-legal importance that may be attached to spinal injury is immense, and probably the greater proportion of actions for damages that arise in our courts are based upon alleged injury to the vertebral column and its contents.

Forms of Injury.—Let us see how traumatisms are likely to produce mischief. Brodie* considers the surgical accidents of the spinal column to be as follows:

1. Fracture without displacement.

* *Med. Chir. Trans.* vol. xx., p. 120 and p. 3.

2. Fracture with depression or displacement, causing pressure on the cord.

3. Fractures complicated with dislocation.

4. Dislocations not complicated with fracture.

5. Extravasations of blood on the surface of the membranes of the spinal cord.

6. A narrow clot of extravasated blood is sometimes discovered within the substance of the spinal cord.

7. Laceration of the spinal cord and its membranes.

8. The minute organization of the spinal cord may suffer from a blow inflicted upon the spine even where there is neither fracture nor dislocation, and where the investing membranes do not appear to participate in any way in the effects of the injury.

Manifestation of Symptoms.—All of these conditions are likely to be found as the result of injury, and as a result we are furnished with a train of symptoms which vary as to severity and prognosis. In some instances the symptoms are of immediate appearance, and subside gradually; in others there is a progressive disease of the spinal cord due to so-called compression myelitis. We find as a consequence various sensory, motor and trophic disorders which are manifested in anæsthesia, or hyperæsthesia, paralysis, spasms or contracture, and atrophy. These may appear gradually one after the other, or almost simultaneously, and depend upon the extent of the injury and destruction of the cord.

Fracture without Displacement.—Fracture without displacement may occur in various situations, but the most common site is the dorsal region.

Dislocation.—Dislocation may occur immediately as the result of violence or as the result of bone disease, with the destruction of vertebræ, and this is of secondary causation. The most common site is the cervical region when the dislocation follows the accident at once, or when there is caries the dorsal vertebræ are dislocated more often than the others.

A blow upon the back of the neck without external marks of injury may give rise to serious bone injuries, such as fracture and consecutive atrophy, so that at a remote time, perhaps, evidences of very serious spinal disease of a progressive character may result in the patient's demise. I have seen three cases in which the injury in the cervical region which at first was considered trivial developed finally in two in caries

and dislocation of these vertebræ, and in the third, where a fracture of the transverse process of the axis occurred so that the most intense cervico-brachial neuralgia was produced.

Case LVII.—In one of these cases, J. B. M., a blow was received from a club in the hands of a highwayman, and beyond the production of a short period of unconsciousness succeeded by headache, vertigo and pain, loss of power and numbness in the arms and hands which moderated and disappeared within a few weeks; no more serious symptoms existed, and the would-be assassin received a comparatively light punishment. In the course of a year, however, the pain in the arms returned, and with it there was a loss of power connected with very great wasting of all the muscles of the arms. I first saw him in April, 1880, two years after the injury, and found beyond the atrophy, which was extreme and involved a great loss of substance of the posterior cervical muscles, and left deltoid, there was a peculiar deformity resulting apparently from the anterior dislocation of the third or fourth cervical vertebra so that a depression existed and the thyroid cartilage was very prominent, and the chin was thrown upwards and forwards. The upper extremities in which he told me the wasting began, present the appearance of those in a person suffering in an advanced form of progressive muscular atrophy. There is a tendency to flexion of the fingers and great hollowness of the palms, the flexor tendons being quite prominent and the interosseous spaces are deepened. He cannot put the left hand upon the top of his head, and when he raises either hand there is aggravation of the severe pain which he constantly complains of. His co-ordinating power and sense of localization are affected, and he can "do nothing without the aid of his eyes." He cannot pick up a pin nor touch his nose even when his eyes are opened, tactile sensation is not good, the tendinous reflexes are everywhere exaggerated, he is irritable and annoyed by noises and is inclined to cry upon the slightest provocation. The pupils were contracted when I last examined him, and did not respond readily. A significant feature of the case is the difficulty he experiences when swallowing.

Fracture Complicated with Dislocation.—It occasionally happens, as in the case reported by Sir Charles Bell, that peculiar injuries may give rise to extraordinary spinal symptoms, and in some cases the fall of a person who has been assaulted may account for a vertebral dislocation, which it is

supposed could have been produced in no other way than by the direct effect of the injury itself. In Bell's case "a man was making a violent effort to impel a wheelbarrow from the street upon the raised foot-pavement, when the wheelbarrow suddenly went before him and he fell with his chin upon the curbstone. He was dead in a few seconds. The processus dentatus was found to have crushed the spinal cord, the ligaments having given way."

Cooper reports an accident of the same kind, not immediately fatal, as the result of a fall, in which the first cervical vertebra was broken.

Potts' Disease.—The production of *Potts' disease* is due to falls, blows upon the back or mechanical violence usually directly applied, or, it may be due to disease of bone without any noticeable injury.* The distinguishing feature of Potts' disease is the existence of kyphosis or bending of the vertebral column so that a deformity results, the anterior part of one or more of the vertebræ (the bodies) being destroyed, and in consequence the spinal processes are thrown out posteriorly so that a peculiar and familiar deformity results. As a consequence of such disease the spinal cord and its membranes are impinged, especially at the anterior point, and what is known as compression myelitis results.

Compression Myelitis.—The commencement of the disease is indicated by pain which is due to irritation of the meninges and posterior nerve roots so that there is great tenderness, darting pains, upon movement of the spine and when the erect position is kept. In the latter case the weight of parts above presses the diseased vertebræ together, and the pain is explained in this way. After a short period of sensory irritation we find that there is loss of power due to the pressure made upon the anterior part of the spinal column. The skin is at first the seat of hyperæsthesia, and subsequently of anæsthesia, which is found in isolated areas, and perhaps eventually becomes general. There is atrophy, the response of the muscles to electricity is very feeble, and the initial loss of power is afterwards succeeded by a rather pronounced paraplegia without rigidity, the muscles being flabby, but after a time they grow more rigid as the lateral columns of the spinal cord suffer, the tendon reflexes being exaggerated. There is much irregu-

* In young persons generally. In older persons the disease is almost always traumatic.

larity about the manifestation of the motor symptoms, and it will be seen that such must be the case from the unequal pressure made upon the contents of the spinal canal. The striking features of compression myelitis are the reflex symptoms; and tremors, jerkings and active dorsal clonus are produced by the slightest form of excitement. The functions of the bladder and rectum are disturbed, and incontinence of urine and feces takes place.

According to Erb the cases may be divided into two classes as to recovery. Some patients under proper treatment show signs of improvement and slowly recover, while others grow steadily worse and cystitis and bed-sores, exhaustion and death follow. In cases of Potts' disease there is usually some projection of the vertebra at a very early period, and when the patient stands erect a more or less conspicuous prominence is found corresponding to the seat of disease, and pressure produces great pain.

The situation and character of the deformity in Potts' disease and its association with changes in the posture and movements of the patient should be critically investigated in instances where suit is brought for damages, for unprincipled individuals who coach a plaintiff are very apt to furnish him with suggestions which though at first sight indicate veritable vertebral disease, are out of consonance with the behavior of the pretender. In one outrageous case with which I am familiar a prominent seventh cervical spine was the alleged angularity, but was in no sense the result of disease; and it may be wise in view of the possibility of this claim being urged in other cases, to call attention to the fact that in many hysterical and anemic women as the result of debility and relaxation to find the vertebra prominens more than ordinarily conspicuous, and perhaps we may discover that tenderness which is so universal in cases of spinal anemia.

Dr. Gibney, of New York, has written extensively in his practical way upon doubtful cases of Potts' disease, where the early symptoms have not only been mistaken for those of other troubles, but where temporary functional troubles have been dignified as true cases of vertebral disease. In undoubted caries of the vertebræ, and especially the traumatic variety, particularly when the upper vertebræ are affected, we find paralysis to be an early and pronounced symptom. Of one hundred and eighty-nine cases collected by Gibney, in which the vertebræ above the middle dorsal region were involved, sixty-two instances of paralysis occurred. It must be remembered that

in the majority of the cases, especially those occurring early in life, there is a strumous element which predisposes.

Case LVIII.—In a rather interesting case recently tried in this city, it was alleged that a gentleman who had been injured was the subject of Pott's disease resulting from a sprain, which was produced by his attempt to control a pair of spirited horses when his wagon ran into a hole in one of the public thoroughfares. The accident occurred upon a rainy night, and he was exposed for many hours to the rain, his clothes became wet through, and he did not change them for some time afterwards. His only injury, so far as was shown by the evidence, was a sprain, caused by his being drawn half way across the dashboard. From the time of the accident he complained of severe spinal pain, which, however, was not localized until a few days subsequently. I found, however, when I examined him that he had pain at several points in the spinal column, more intense, perhaps, in the lumbar region. Within a few weeks he began to develop symptoms indicative of locomotor ataxia, and at the time of the trial he presented the classical features of that well-known disease, his tendon reflex, however, being exaggerated, suggesting invasion of the lateral columns of the spinal cord. A distinguished physician who had attended him in the beginning claimed that he had an angular projection, but neither Drs. Hammond, Clymer, Stimson or myself could find the least deformity, and taking into account the fact that although the malady had existed for so long a time there was no paralysis whatever, we excluded the idea of Pott's disease, and practically agreed that it was a hybrid form of sclerosis, traceable entirely to the exposure on the night of the accident.

In cases where Pott's disease has been claimed to be due to an injury of the back, it commonly happens that there has been trouble before the accident, and though in very rare cases an inflammatory process beginning in the joints as the result of a sprain may be found, it is not common for any extension to take place.

Extravasation in the Membranes of the Cord.—5. Extravasation into the membranes of the cord may follow a fracture or severe shock, such as a fall upon the buttocks or upon the back, or in consequence of wounds made by sharp instruments. The appearance of symptoms is immediate, and if the hemorrhage be extensive the patient may be deprived of

power, and there is paralysis of the body below the level of effusion. In some cases the appearance of symptoms is gradual and marked by pain and rigidity of the back, pain in the legs, anæsthesia, or, perhaps hyperæthesia; darting pains, formication and other symptoms of irritation of the posterior nerve roots. The loss of power which follows is of a light grade, unless there be compression-myelitis and invasion of the spinal cord. The functions of the bowels and bladder are affected and reflex excitability is usually lowered. We may localize the hemorrhage by the existence of spinal tenderness, and by the involvement of the upper extremities, the presence of pupillary changes, headache, respiratory embarrassment, etc., when the cervical region is involved. The prognosis is not necessarily bad unless there be extending inflammation to the cord. A serious feature of the trouble is the existence of the clot in the upper part of the cord. The prognosis is then apt to be exceedingly bad.

Sir Astley Cooper reports the case of "a boy, aged twelve, who received a violent jerk of his neck by a cord thrown over his head as he was swinging forward in a swing. He felt no bad effects at the time, but afterwards his limbs became weak and his neck stiff. In eleven months this increased to palsy, and he died at the end of twelve months after the injury. A large quantity of extravasated blood was found in the spinal canal betwixt the bone and the theca vertebralis."

Clot in the Cord Itself.—6. When the spinal cord is involved and contains a clot, the symptoms are much more severe and dangerous and much more likely to be followed by permanent symptoms, indicative of degeneration. The early symptoms need not necessarily be alarming and may be of a light grade; but in the midst of an apparent amelioration after injury, a sudden paralysis may make its appearance, and in this case it is probable that a secondary process of softening has caused the rupture of a blood vessel. The paraplegia resulting from spinal apoplexy is usually complete, if the escape of blood be at all considerable, and its extent depends very much upon the seat of the lesions. At a high level we may have the respiratory and oculo-motor symptoms, as well as those indicative of disturbance of the medulla, and as a consequence we find marked temperature changes and affections perhaps of the cranial nerves; if the hemorrhage be small and confined to a limited portion of the spinal cord, of course there need be little more than local degeneration and its

consequences. Wilks refers to a case in which a blow upon the spine caused simply an effusion of blood into the gray matter of the cord and the primary symptoms were those indicative of sensory disturbance, and he calls attention to the well recognized fact that very light ruptures of bloodvessels in this region are apt to be followed by extension of the lesion, and consequently of the symptoms.

Laceration of the Spinal Cord and its Membranes.—7. Laceration of the spinal cord and its membranes is a very rare accident and probably never occurs without vertebral injury. It is possible for penetrating wounds to produce such mischief and as a consequence we are almost immediately furnished with a train of such manifestations as spinal hemiplegia or paraplegia, the former resulting from a one sided wound which produces severance of the motor tracts with disturbance of sensation upon the other side of the body. In fact, whether the one sided injury to the spinal cord depends upon penetrating wounds or lateral fractures with displacement of fragments, the symptoms are apt to be those of the peculiar paralysis originally described by Brown-Sequard.

In all cases of spinal injury the appearance of symptoms of course depends upon the degree to which the spinal cord is impinged upon, either by the products of inflammation started in the meninges or coverings, or in the cord itself. Dislocated or fractured vertebræ are very apt to be followed, at first, by meningeal symptoms, such as pain and nerve irritation, and afterwards by the production of symptoms referable to the cortex of the spinal cord ; and among the later we find, as a rule, that the earliest is an affection of motor power, which is succeeded perhaps by rigidity and contractures, and by an increase of the reflex excitability of the tendons. When the inflammation of the spinal cord is consecutive either to disease or thickening of the meninges or extensive laceration of the cord itself, and extends transversely across the spinal cord, we then find total abolition of motion and sensation ; paralysis as well of the bladder and bowels, and disappearance of reflex excitibality.

Spinal Concussion.—8. *Concussion of the spinal cord* if at all serious is apt to be followed by symptoms which develop very quickly, and in consequence we find back pain referred to the dorsal or lumbar region, the back of the legs or thighs ; a want of power, an atony of the bladder and rectum, and various ocular symptoms. There is rigidity of the back and the slightest movement causes intolerable pain, and ordi-

nary walking causes great suffering. If the patient be told to jump he will complain of increased pain, caused by the jar, and he suffers after the slightest motion. The loss of power is extremely variable and may vary from simple weakness to complete paraplegia, and electrical reaction of the muscles is abased or lost.

Erb's Classification.—Erb* makes the following divisions regarding the appearance of symptoms:

"*A. General and very severe symptoms at the instant of injury. Death in a short time. Severe form of shock.*" (Immediate complete paralysis. Disturbance of consciousness, involuntary discharges, depression of pulse, and arrested respiration. Speedy death in a few days. Usually from crushing or other severe injuries.)

"*B. Severe symptoms at the moment of receiving the injury. Cure in a short time. Slight shock.*" (No loss of consciousness, usually paraplegia, pains, anesthesia, increased reflexes, rapid inprovement in a few days and speedy recovery.)

"*C. Severe symptoms at the first, followed by a protracted illness of some years' duration; recovery in most cases.*" (Shortly after accident progressive paralysis following weakness of all extremities, pain in back, girdle band, light anesthesia, mental disturbance, vomiting. Slow and gradual improvement.)

"*D. Very slight symptoms at the beginning; a severe progressive spinal disease develops after a longer or shorter time. Result doubtful.*" (Primary nervous disturbances of a light grade, weakness, mental confusion. After a short time severe symptoms develop. Emotional depression, bad sleep, weakness and ataxia of legs, pain and paresthesia, weakness of bladder, atrophy, with pronounced meningo-myelitis.)"

The above are the varieties collected by Erb, and the symptoms are familiar and well marked. He is disposed to take a rather favorable view, except in those cases in which bed sores and other serious evidences of cord disintegration are expressed.

Case LIX.—A gentleman sent to me recently by Dr. Howard of Montreal, presented grave symptoms of speedy development as the result of an apparently trifling spinal concussion which seemed almost out of proportion to the injury. The Rev. Dr. L., a heavy man weighing 212 pounds, while walking upon a wooden sidewalk caught his toes in a hole and fell somewhat vio-

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* *Ziemssen's Cyclopedia*, vol. xiii p. 350, Am. translation.

lently. This was about eighteen months ago and since that time to the present (Jan. 1883), a train of very serious expressions indicative of resulting organic disease, have made their appearance. He did not lose consciousness after the fall but felt dizzy and sick for ten minutes or so, and beyond a slight bruise of the left hand, which he had thrown out to save himself, he suffered but little inconvenience. About three weeks after the accident, however, he began to feel cramps in his left hand, the fingers becoming rigid, as well as great pain in the back especially in the lumbar region, but subsequently it extended upwards. This was associated with paroxysms of intercostal neuralgia with attacks of coughing and *besoin de respirer*, which at times amounted to distressing dyspnœa. When I first saw him in January there was some loss of power in both lower extremities especially the left, and he walked with difficulty. There was no anesthesia but paresthesia upon the line of the last dorsal vertebra, the legs were generally atrophied and his gait was characterized by ataxia, rather more marked on the right than the left side. His superior extremities were involved and the left hand and arm are especially weak and it causes him great distress and pain to raise them; he can not button his clothing nor use his hands in the execution of delicate acts. There is no lost sense of localization, the tendon reflex seems to be unaffected. Galvanic and Faradic action are disturbed and but few of the muscles of the upper extremities respond to stimulation. His breathing is very shallow and rapid, and his voice is dry and husky and it is an effort for him to talk. No evidences of disease were found on examination of the heart and lungs, and the pelvic organs are affected to a slight degree; he is troubled with tympanites. There are so far no cerebral symptoms and no morbid ophthalmoscopic appearances. Intellectually he has not suffered, but he tires easily and can not apply himself to his work.

Trophic Changes after Spinal Concussion.—Trophic changes are apt to be presented, which are rare however, but of great interest.

Case LX.—A patient recently placed himself under treatment for the relief of nervous sufferings following an accident in 1879. He was thrown from a wagon, striking upon his left side and cutting and bruising the leg and thigh of that side and wrenching the right leg, and back. According to his statement he was not at first insensible but fainted and remained unconscious for a few minutes; his injuries were comparatively trivial and

he resumed his duties in his regiment in two or three days, doing light work. Within a short time he became nervous and unable to sleep as he had before the accident, and was obliged to come East. Since July, 1879, he has suffered from various symptoms following concussion such as pain through the lower part of the spine, over the first and second lumbar vertebræ which sometimes extends upwards or about the body; he has in addition dull pain at the back of the head but no vertical pain, and none in the arms ; he has sciatica from time to time as well as pain in the ankles, more especially the left. It is impossible for him to get a comfortable position and he sits on one side of the chair. He cannot rise from his chair without great difficulty and there seems to be not only aggravation of the spinal pain but some loss of power as well. There is difficulty in going up stairs, and he usually does so laterally, the right leg being put in advance of the left. He limps slightly with the left leg, which is decidedly weaker than the right, and when tested the electrical reaction is diminished but there is no atrophy. The left tendon reflex is absent and the right is exaggerated. He co-ordinates well and can stand with his eyes closed. He can not turn over in bed without first sitting up and he has very great difficulty in arising from the recumbent posture. There is some incontinence of urine proceeding from atony of the bladder, and this fluid is loaded with lithates. There is constipation. He has had vertigo and blurring of vision but no ocular changes are to be discovered. His speech is somewhat affected, there being a clumsiness as well as actual transposition of words. By far the most interesting feature of the case is the manifestation of trophic changes. The skin was white and soft before the accident ; within a year a peculiar bronzing and mottling appeared about the ankles, which were covered with freckles, there being more perhaps on the left side than the right, and there is some swelling.

This patient has received very little benefit from treatment of any kind, and it is very probable that he has a serious organic change of both brain and spinal cord ; his recovery is very doubtful.

Fatal Cases of Spinal Concussion.—The two following cases reported by Wilks are examples of the same form of spinal concussion and in both instances the patient died :

"Joseph P—, æt. 32. He was a railway porter, and whilst engaged in pushing a railway truck along the line, he suddenly came to an ash-pit, when, for fear of falling, he made a jump

into it, and ricked his head. He seemed for a moment to be powerless, but soon resumed his work. On the following day he continued also his work as usual. On the third day, whilst walking along the Borough, he suddenly fell in the street, and was unable to rise, owing to the weakness of his legs ; this increased during the next two days, when he was brought to the hospital. He was then completely paraplegic, had no power over his bladder and bed sores were already appearing. Subsequently the chest became affected, and he died in six weeks after the accident. The spinal cord appeared quite healthy to the naked eye. When examined by the microscope, some fatty granules were found in parts, but the change from the normal appeared very slight."

"Wm. A—, æt. 21. He fell on his back more than a year before his death, and then had symptoms referable to concussion of the spine. He gradually recovered and resumed his work, when symptoms of paraplegia slowly came on. These gradually increased, so that for about four months before his death his legs were completely paralyzed ; then his arms became affected, and subsequently his eyesight. The intellect quite clear. After his death, when the the cord was removed, it appeared at first healthy as regards its general look and its firmness. A section, however, showed the presence of disease extending its whole length, and passing through the pons to the corpus striatum. There was no disintegration or softening, but a remarkable change had occurred from the presence of a translucent albuminous material within its substance. This was for the most part situated toward the surface of the cord, so that a section showed its circumference converted into a gray translucent material. The contrast between the original white medullary matter within and the adventitious substance around it was very great. In some places the latter had penetrated more deeply, so as to involve the gray matter of the cord. The pons varolii had on its surface two or three patches of the same material, and passing into the substance to the extent of about one-eighth of an inch, and on the corpora striata and thalami optici, especially the former ; there were some similar patches of translucent matter on the surface. These did not penetrate deeply, and were not observable in the interior. In this case death was due immediately to suppurative nephritis."

Leyden presents a case* of which mention may be made.

* *Archiv. für Psychiatrie*, etc., viii., 1878, page 31., and *Boston Med. and Surgical Journal* Aug. 22, 1878.

Its interest lies in the fact that the patient presented concussion symptoms followed by acute myelitis and pachymeningitis which proved fatal.

"The patient, a healthy man of forty years, was severely bruised, in 1873, by being shaken about in a railway carriage, which had slipped off the track, and was dragged along by the engine for a short distance. His principal symptoms from that time onward were pain in the left shoulder, and paresis of the left arm, both of which continued until his death, though not to the same degree as at first; occasional attacks of pain in the sacral region, and in the back of the neck, and between the shoulders; "girdle-sensation;" until finally, in January, 1876, he had a sudden attack of acute myelitis, which proved fatal. The diagnosis made was myelitis due to pressure of a tumor in the lower part of the cervical enlergement of the cord. The autopsy confirmed the diagnosis, showing the tumor to be the result of chronic peripachymeningitis."

Locomotor Ataxia as the Result of Spinal Concussion.—*Petit alludes to locomotor ataxia that may be caused by traumatism, and details among others the case of a man who received a kick from a horse. He was unconscious for some hours, but no immediate bad symptoms followed. A year later he began to suffer from cramps, pains, and tingling in the legs, and afterwards from incontinence. I have seen several cases which were quite decided in their expression, and in each instance some serious shock or blow was described. In one case the patient fell from an open window and the sensory symptoms made their appearance within a few weeks, and afterwards there was ataxia, disappearance of the patellar reflex and ocular troubles.

Gowers† refers to the possibility of a general myelitis resolving itself into a localized degeneration of the posterior columns.

Postero-Lateral Sclerosis.—Dr. Edes has published four cases which illustrate the frequent occurrence of degeneration of the postero-lateral columns of the cord as a result of spinal concussion. He noticed in these cases a very decided increase in the tendon reflex, ankle clonus, as well as contractions and other troubles. One of his cases is that produced:

"T. D., laborer, fell down-stairs eight days before his en-

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* *Revue Mensuelle*, tome iii., 1879, p. 209.

† *Br. Med. Journal*, vol. i., 1879, p. 304.

trance into the hospital, and thinks he struck on his head, but has no bruise anywhere. Immediately after the fall he lost the use of both arms and hands. He can now move his right elbow a little. His legs are rather weak, so that he staggers on attempting to walk. There has been twitching of both legs for the last two days. The next day after entrance he did not sleep well. He complained of pain darting down the arms, which, he says, began immediately after the accident. The muscles react well to the faradic current. The paralysis disappeared rapidly and almost completely, and it was after his officiation for some time as a volunteer nurse, and about two months after the accident, that it was found that the tendon reflexes of the upper extremities were greatly exaggerated, moderate taps upon the tendons of the biceps, triceps, supinator longus, deltoid, pectorales, and even the sterno-mastoids exciting decided, and in some instances, very active responses. Patellar tendon reflex somewhat increased; no ankle clonus. He was discharged relieved."

The Possible Complication with Lead Paralysis.—In certain injury cases the defense may be presented that the patient's symptoms are in reality due to lead poisoning, the result of his trade—and in such a case I appeared some years ago. In apposition to my case is that reported by Dr. Edes * in which the symptoms were largely complicated by those of lead poisoning. In this case, however, the major symptoms were due to the accident.

"D. H., aged twenty-six, lead-worker, fell backward downstairs while drunk. When admitted to the hospital the next day had cellulitis of the right leg, and various bruises on both legs. Four days after he was unable to move the right leg, and there was incontinence of urine. Two days later the left leg would not move. He had lost more or less strength in his hands. Two months afterwards it was noted that the legs "draw up" at night, and he has difficulty in straightening them. He has pain in the back of the neck and between shoulders. There was considerable muscular atrophy in the left hand, less in the right. Reflex and tendon reflex about normal. Ten days later the ankle clonus was very well marked. The patellar reflex was attended with several vibrations. There was no (slight?) olecranon tendon reflex. From this time his condition continued about the same, although he himself thought he improved. Attempts at voluntary movement

* *Boston Med. & Surg. Journal*, Sept. 21, 1882, p. 265.

were attended with strong spasmodic movements in both legs, which could easily be excited also by the usual procedure for obtaining ankle clonus.

"He was discharged from the hospital not relieved. In this case the postero-lateral degeneration may perhaps have been secondary to some more limited injury at first, say, for instance, small hemorrhages.

"This man had a lead line on his gums, and lead was at one time found in his urine. This point is interesting in connection with a possible affection of the anterior horns and the atrophy of the muscles of the hands noted early in the case."

CASE LXI.—A man while sitting in a street car received a severe spinal injury by reason of a collision with a heavy wagon. The pole of the wagon was forced through the back of the seat, striking him squarely in the middle of the back. He subsequently developed a meningo-myelitis with great pain, irregular paraplepia and atrophy of the muscles of the lower extremities. When he sued for damages, evidence was brought forward to show that his occupation had been that of a painter. He had not worked at his trade for a long time before the trial yet one of the witnesses thought he discovered a lead line. I could not find any such change, but did find that his teeth were carious, and that he did not clean them, and the result was a spongy condition of the gums. His motor symptoms and atrophy were confined to the lower extremities, a very uncommon situation in lead disease, and there was no anesthesia. His reflexes were exaggerated, and his upper extremities were involved. I subsequently learned that though he did not work at his trade after the trial, the symptoms advanced. The verdict was rendered for the plaintiff.

Suits for Damages.—Suits for damages instituted by persons who have been injured in railway accidents have during the past twenty years been exceedingly common, and often of great interest. Much of this arises from the expression in many cases of symptoms indicative of disease of the nervous system of a very peculiar nature, first recognized and described by Mr. John Eric Erichsen, a distinguished London surgeon. Mr. Erichsen's book has figured in many of the lawsuits that have since been brought both in England and this country, and at least, (putting it at a low figure,) twenty millions of dollars have been paid to persons claiming to have received spinal concussions since its appearance. In this country the

wrecking of an excursion train on one of the New England Railroads—the Revere disaster—entailed a loss to the Eastern Railroad in judgments, settlements, and legal expenses of half a million of dollars, and another accident cost the Old Colony Railroad $395,000.

In similar cases immense sums of money have been paid by sympathetic juries. In England the sum of £16,000 was awarded to one claimant, while in this country to Harold the sum of $30,000 was allowed by a Brooklyn jury.

The very nature of the irregular group of symptoms encourages fraud and rascality. Dr. Hodges in two admirable papers calls attention to the fact that in "twenty-one cases where the so-called symptoms of concussion of the spinal cord were alleged to be present, which have been under my personal care, ten are believed to have been deceptions, and in six the diagnosis, as regards deception was doubtful. Of 26 similar cases observed by Rigler, seven were found who simulated, and in 13 the diagnosis in regard to fraud was doubtful. Of 49 cases, therefore, it would appear that 36 or three-fourths of the whole number were really or probably deceptions."

In my own experience the proportion has been equally great. The fact remains that after sudden and violent shock to the human body, even though there may be no apparent external marks or wounds a train of symptoms, indicative of profound functional disturbance may remain for a variable time, and may be followed by unmistakable organic disease of the spinal cord or brain.

The peculiar transmission of a concussion is very often somewhat remarkable. So far as is known, the disease known as railway spine, does not follow the hurling of a passenger against the seat or woodwork of a car, so much as it does the undefinable molecular change which is supposed to occur when the car in which the person is sitting is suddenly stopped when under way and going at the rate of from 20–40 miles an hour.

Embranlement.—What the French call *embranlement* immediately follows the complete arrest of motion.

It may happen, however, from the transmitted force of a collision with another train which may run into one stationary, that a person sitting near the end of the stationary train furthest

* Hodges *Boston Medical and Surgical Journal*, Ap. 28, 1881.

removed from the point of collision, suffers a spinal concussion sufficient to give rise to spinal injury.

A gentleman I saw who was injured in the H. R. R. R. accident, at Spuyten Duyvel, sat in the smoking car, the eighth car from the end, yet when the collision occurred he was thrown forward against the seat before him and then backward, receiving a spinal shock sufficient to give rise to objective as well as subjective symptoms. This, however, is not often the case nor is it when the person is asleep as was my patient. Much damage may occur from an apparently trifling accident. Mr. Charles Francis Adams, Jr., relates the circumstance of three gentlemen leaving a rear car of a train which had run into another, and going to their homes in perfect ignorance of the accident at the time, while in the front cars there was great loss of life.

The immediate nervous effects are often violent. I saw some time after an accident a strong man who had escaped from a wrecked car. Though an hour had elapsed, his nervous prostration was great, his hands and feet were icy cold; his whole body was agitated by tremor, and respiration and circulation were very much disturbed.

Lighter Forms.—An interesting case of the lighter form of spinal concussion is related by Bernhardt*.—"A stout, healthy man received a violent concussion in a railway-accident, remaining senseless for some time, and being confined to his bed for three weeks with scalp-wounds, etc. When he was able to get about, he complained of general loss of strength, and of weak vision; during the first few weeks, of double vision. Examination at this time showed him to be in good general condition. He complained of headache, especially in the region of a scar some two inches in length over the left parietal bone. He was not particularly sensitive to blows on the head. He was more easily disturbed and depressed in spirits than previously. He was exceedingly sensitive to heat, which made him giddy and caused a throbbing in the scar. He could not bear the noise of wagons etc., and was unable to ride in any conveyance. Stooping or looking up or suddenly to one side made him giddy. He could read, but only for a short time, as the letters soon began to swim before his eyes. The pupils were similar and reacted to light, which was unbearable if bright. The movements of the ball were perfect. No change

* *Berliner Klin. Wochenschrift*, 1876, p. 275 August 9. Abstract in *Phila. Med. Times*, 1876.

visible with the ophthalmoscope. Hearing good ; no buzzing in the ear. Taste and smell normal. Nothing abnormal in the region of the remaining cranial nerves, nor in that of the facial, trigeminal, or hypoglossal. Pressure over the spinous processes of the vertebræ is only painful towards the lower part of the neck. Subjectively, a feeling of tension was experienced in the loins ; rising and sitting down could be accomplished with difficulty. Movements in the upper extremities were free, but there was a loss of motor power ; the outstretched fingers trembled ; it took him a whole day to write a letter, the fingers trembled so when used. The patient could stand with the feet together, even when the eyes were shut, and could also walk, but slowly and with careful steps. The left leg was slightly dragged. He could only stand a short time on either leg alone. All movements could be performed with the limbs, but a very little hindrance sufficed to stop them. The left seemed to have less power than the right. No disturbance of sensibility. The patient was aware of even slight movements, and localized correctly. He could perceive, if his bare feet touched the ground, what the nature of this was. His urine was normal, and passed without difficulty by a little extra exertion. He could only retain his stools (otherwise normal) for a very short time. In a somewhat similar case which came under Dr. B.'s notice, no symptoms of brain-trouble were observed for a week subsequent to the accident. This patient suffered greatly from hyperesthesia. In commenting upon these cases, Dr. Bernhardt alludes to the difficulty of making an exact diagnosis regarding the portion of the brain most affected. He also suggests the treatment advisable, and points out the importance, from a legal point of view, of the fact that one of the patients went about his ordinary occupations for a week subsequent to the railway-accident before any brain-symptoms developed themselves."

Pulse Changes.—The pulse of spinal concussion is often changed in character and becomes weak, irregular and greatly excited. I saw a patient with Dr. Charles E. Lockwood of this city, who presented a remarkable change in this respect.

Case LXII.—

Dr. Lockwood furnishes us with the following report from his history-book.—" On December 1, 1881, I was called to see Mr. W. W. R., who gave the following history:—While traveling from Washington to New York on a train on the Pennsylvania

railroad on the morning of Nov. 30, 1881, he had occasion to enter the water-closet of the car in which he was, and while there in a standing position, adjusting his clothes, a collision occurred between the train on which he was and one following. He stated that he was first thrown forward, then backward, and then forward again, his abdomen striking upon the upturned edge of the cover of the seat of the water-closet, which, having been raised was in a position perpendicular to the horizontal plane of the seat; he stated that he vomited blood mixed with bile for about two hours, suffered much from pain, faintness, and was bathed in a cold perspiration which saturated his underwear. When he reached Jersey City he was seen by Dr, Watson who prescribed for him. He then came over to New York feeling a craving appetite, ate some solid food which he vomited soon after, and then took the cars to his boarding-house, where he endeavored to write some letters but was compelled to go to bed owing to pain in his back.

" When I saw Mr. R. on Dec. 1, he was suffering from general hyperæsthesia over the whole body but especially over the arms, legs, abdomen and back, severe aching pains in abdomen and back, and he was unable to move from the recumbent position without suffering from attacks of nausea and retching ; he had passed his urine and there was no paralysis or loss of sensation and there had been no movement from the bowels.—Pulse 72 in a minute, and axillary temperature 98½°. Mind clear and hopeful. On Dec. 2, he seemed to feel dull and weak, Pulse, 66. Temp. in axilla 97⅕, Resp. 18.—Was unable to take any solid food, and even milk and lime water in small quantities brought on attacks of retching ; passed his urine only once in 24 hours ; quantity, about 8 oz. Spoke of having *slight cramping in his toes*, as though one were crossed over the other ; urine examined chemically and microscopically and no evidence of kidney disease found ; specific gravity, 1020, acid, no albumen or casts. Matters continued about as described until Dec. 6, when the pulse was about 76 and intermitted three times in a minute and he complained of feeling slight tingling in the ends of fingers. Suspecting trouble of spinal cord I asked Dr. Walter H. Gillette to see him in consultation on Dec. 7, when a diagnosis was made of concussion of the spinal cord. I saw Mr. Randall twice daily from Dec. 2 to Dec. 19, 1881 and once daily with one exception from last mentioned date to Jan. 11, 1882 ; during that time his symptoms have been generally as follows: bowels sluggish and not inclined to move except after medi-

cine, urine passed with some hesitation and difficulty and at infrequent intervals, sometimes only once in 36 hours ; skin of hands dry and whitish-looking, showing malnutrition, prickling of ends of fingers, a continual "buzzing sensation" as he expresses it, in the fingers and toes, but which he has become so accustomed to that he does not notice unless spoken to about it ; twitchings of muscles of calves of legs, especially right leg ; burning aching sensation in the back, especially that portion between shoulder-blades and over lumbar region ; low temperature from Dec. 2 to Dec. 11, ranging at about 97⅘ in axilla and on Dec. 11 and Dec. 15, being about 98½ in the rectum, not having been taken in rectum on other dates. Pulse intermittent, sometimes there being as many as ten intermissions in a minute; the intermissions were noticed first on Dec. 6, and continued until Dec. 11, there having been none from Dec. 1 to Dec. 6; from Dec. 11 to Dec. 29, pulse was regular, since which time it has at times been regular and again intermittent ; he has had hallucinations and has been somewhat delirious at times, especially in waking from sleep ; his memory is defective, and he has complained of confusion of mind and inability to concentrate his thoughts ; has suffered from restlessness and inability to sleep at night. Dr. Hamilton saw the patient with me on Dec. 24, 1881 and Jan. 9, 1882, and confirmed the diagnosis of concussion of the spinal cord; at the present time his condition is about as follows: he suffers occasionally, more especially after any exertion, from twitching of posterior muscles of legs, pain in the back, numbness and tingling of fingers and toes, stands and walks with difficulty, being liable to fall unless supported, bowels sluggish, urine passes at times slowly and at times more freely. Pulse about 78 and intermittent, temperature about normal; pupils unequally dilated, tendon reflex increased in both legs."

Ocular Symptoms.—The ocular symptoms following spinal concussion or more serious spinal injuries are exceedingly interesting but by no means as common as Erichsen would have us believe. It was Gowers* who first called attention to the serious changes that may exist at the fundus oculi as the result of a railroad injury ; but in this case the patient received a blow upon the left side of the forehead which rendered him insensible for five minutes. He was laid up three weeks and suffered from spinal and head pain and general nervous disturbances. Paige, who refers to the case, says that he present-

* *Medical Ophthalmoscophy*, 4. ed., p. 348.

ed six months after the accident loss of vision in the left eye to a great degree, limitation of the field, and slight changes in the optic discs. In two cases I have detected well-marked optic neuritis and in one there was commencing atrophy in both eyes, with Argyle-Robertson pupils, but both of these patients presented organic spinal symptoms. In many cases we find temporary functional disturbances of accommodation, which, however, need not be viewed with any seriousness. Among these are patients who really possess slight asthenopia which may be due to the general condition of bodily weakness, but this is all. Such patients are unable to concentrate their attention when reading, and such an effort produces headache. Sometimes we find that the disturbance is entirely due to a hypermetropia which is a congenital condition, and is increased by the patient's nervous exhaustion. In cases of fraud it may be found that the alleged defect is due to cataract or some condition entirely foreign to the case.

Bogus Cases.—In contrast to the cases I have just detailed, and who, strange to say, made no attempt to bring suit or obtain compensation, are those which are familiar to every physician who has occasion to examine persons who present themselves after almost every railroad accident with doleful stories of suffering and injury which are far more often imaginary than real. I have seen many of these cases at the solicitation of the railroad companies, and have repeatedly heard the same story of deception.

The Effect of a Verdict.—In the great majority of cases a good verdict brings with it a complete cure, and patients who have been brought into court upon a litter surrounded by tearful and interested friends and attentive physicians, whose cases have been dramatically described to the jury, leave the court room and a few days or weeks after the swindle engage in their regular pursuits as if nothing had happened. It is to be regretted that in such cases physicians have been found who have been willing to testify to the existence of serious organic disease of the nervous system when no evidence of such was presented except the patient's unreliable and prejudiced statements. This class of cases is divided into two sub-divisions.

Hypochondriasis and Spinal Concussion.—Those who suffer from a hysteria or hypochondriasis which in one way is a diseased condition, and does not necessarily carry with it intentional dishonesty, and under these circumstances a fair

verdict, directed rather to compensate for the injury of mind, should be given.

Fraudulent Litigation.—Another division of the above may be made, in whose ranks are to be found a variety of impostors as motley and disreputable as Falstaff's army. No one but the medical officer of a railroad can conceive of the cunning deviltry which enters into the machinations of one of these disreputable claimants when backed up by an equally unscrupulous attorney. Careful detective espionage will reveal the fact that this paralytic (?) is about his business; that he is consulting with his friends at the porter house when he imagines he is not under observation; and that perhaps he may be engaged in such amusements as horseback riding, base ball playing, or the like, when it has been claimed that he is paralyzed, or that he suffers from an inflammation of the spinal cord which prevents him from moving his body!

Instances of Deception.—In one of these cases, that of a man who claimed that his injuries were immediate, and that he was unconscious at the time of the collision, it transpired subsequently that he not only loitered about the wreck but that he walked home and attended to his daily pursuits without seeming discomfort. In another case the individual was paid a large sum of money, and it was afterwards proved that he had not been upon the train at all.

I was called a few months ago to examine a man whose complaints were especially heartrending and unfortunate, but whose bodily condition did not bear out his story. This man's physicians claimed that *after* the accident he had developed a degeneration of the brain and spinal cord, but on good authority I learned that the same claim had been made by him several years before after an accident on another road, and an equally unfavorable condition of affairs was alleged to exist.

Case LXIII.—

One of the most audacious instances of swindling I have ever known occurred as the result of the 42d street accident upon the Elevated Railroad. A young girl presented herself at the office of the company, presenting beside a vague series of symptoms suggestive of spinal concussion, a peculiar depression of the sternum which she claimed was a traumatic result of the collision. Upon the statement of her physician, whom she had deceived, three thousand dollars were given her,

fifteen hundred of which were deposited in the bank in her name and the balance devoted to the payment of doctors' bills and and other expenses. It was found within a year that the girl had not been upon the train at all, that the depression of the sternum had been made by an instrument like a brace and bit, held against the chest, and used in the process of artificial flower-making, a trade she had been engaged in for some time, and that her other symptoms were pure inventions. Her father, who had coached her in her rôle of deceit, was arrested, convicted and is, I believe, now in Sing Sing.

Exaggeration.—As I have said, the mental condition of many of these patients is purely hysterical, and from constant concentration of attention upon themselves and the expectancy of a verdict, a state of real suffering is produced which is striking and peculiar. While every muscle of the body may preserve its integrity of function, and no organ suffers pathological change, we find an emotional derangement which cannot be shammed, and there is a depression in some cases amounting to simple melancholia. With a few suggestions from Mr. Erichsen's book and a knowledge of how some friend was affected in another accident, a patient is ever ready to believe in, and complain of a variety of aches and pains which are purely imaginary. By the statement of these patients, and authors who have described them, it is found that "constant pain in the back," fatigue of the muscles, of the legs especially, headaches, "incapacity for mental work," confusion of ideas, "loss of memory and weakened vision" are characteristic symptoms of spinal concussion.

Hysteria and Spinal Concussion.—The unprejudiced physician will find, if he believe that these conditions really exist, that there are as well many other symptoms which are conspicuous in anæmic and hysterical persons who perhaps suffer from pelvic disorders, but depend in the case of the litigant upon nervous excitement and exhaustion and are entirely independent of any violent influences. Careful questioning may determine the existence of pain and tenderness over the seventh cervical spine, of ovarian tenderness; perhaps of digestive disorder, of the globus hystericus in some cases; and of pallor and other well-known manifestations of functional nervous disturbance.

In one of Page's cases the claim was made that the seventh cervical vertebra was unduly prominent, and the result of an injury, the patient having received a bruise upon the lower part of the back. Two years after the accident she was perfectly

well. Not only may the person who is so eager for pecuniary balm attempt to palm off long existing troubles for genuine injuries, but he may invent the most outrageous and improbable pretexts for pressing his suit. With such patients a loss of procreating power, or pretended injuries to the organs of generation are often claimed, while no such impairment really exists, and the matter is made more difficult by the absolute refusal of the patient to submit to any examination by the defendant's physicians, and in this she receives occasionally the support of the Court. A ridiculous side of the question is often presented after the disposal of the case, and, unfortunately, after a sympathetic jury have given a sentimental verdict. In one case with which I am familiar, it was claimed that the shock had produced an incurable dislocation of the uterus and that the woman would never again bear children, a few months however, after a handsome verdict, she became a mother. It sometimes happens that the influence of uterine disturbance will greatly increase the nervous excitement and prejudice the minds not only of experts for the plaintiff but the jury as well. In a woman, the subject of miscarriages, this question arose. And Dr. Page, who reports the case, stated that though she was pregnant at the time of the accident the labor was not interfered with, but that she subsequently had several miscarriages and much nervous suffering, which she believed to be due in great part to the exhaustion attendant upon frequent gestation. It seems that the jury were inclined to take his view of the case, for they gave her but one-sixth of the amount asked for. Erichsen is disposed to take a grave view of a complication of pregnancy, not so much in regard to the immediate but remote effects of the concussion. So far as my own experience is concerned, I have found little to warrant the belief that the functions of the organs of generation in women are affected in any serious way by a trouble of this kind. This is true also in regard to the other sex, although claims are constantly made in the courts that all manner of disturbances and great enfeeblement follow spinal concussion. In cases of injury to the spinal cord attended by organic involvement above the splanchnic nerves such changes may follow, but these are very rare. Care should be taken not to accept the statement of the patient as conclusive that vesical irritability or incontinence are due to nothing else than the injury, for in many of these cases there may have been previously existing cystitis, and in one I examined I found that the man had been buying and using a well known and popular specific known as Bethesda water while

in other cases a history of urethritis with its attendant consequences was ascertained. In men past middle age it may be well to find whether or not there is an enlarged prostate.

Insanity and Spinal Concussion.—It is sometimes urged that patients become insane as the result of spinal injuries. While I am perfectly willing to admit that organic spinal disease may by extension produce mental aberration, I have yet to see the case of insanity due to the effects of spinal concussion. I have no doubt that fear and mental shock incident to the excitement of a collision may give rise to derangement of the mind and grave hysteria and hypnotic states may be induced.

A case related by Page is that of a strong and healthy man æt. 30, who was in a collision, and who presented the usual signs of having received a sprain of his back and some general shock to his nervous system. He lay for a long time in a hypnotic state, alternating with fits of violence and passion. When he awoke from this, he became the subject of a delusion that he was poisoned, and was accordingly, about ten months after the accident, removed to an asylum. He remained there about six weeks; and while an inmate he adopted a peculiar gait, which lasted up to the time when his claim was settled two years after the accident, and which formed the ground of a very serious view that he had received a permanent damage to his spinal cord. His mode of walking was thus described when he came out of the asylum: "He puts the weight of his body on two sticks placed in advance of him, and draws each leg alternately forward with the foot much everted. When about to advance one leg he twists the other inwards on the toes, so that the latter point forwards instead of outwards. He keeps the knees quite stiff. In this way he shuffles along with great rapidity. As he stood with his back against the wall, he was asked to lift up his knee, but he professed utter inability to do so." Very careful examination was made at this time as to the nutrition and state of the legs, and a report shortly afterwards by a very able physician runs thus: "The reflex irritability and Faradic excitability of the muscles of the lower extremities are normal; there is an entire absence of affection of the bladder or rectum, or of any trophic change such as muscular atrophy and bed-sores. There is also an entire absence of muscular tension, rigidity, contraction, or deformity in the lower limbs. Examination did not enable me to determine whether any affection existed on

the sensory side, as the patient absolutely refused to answer any questions. On the whole, my opinion of the case is that it is an example of many recorded instances in which a slight and unimportant injury develops various emotional and hysterical symptoms." At a final visit made to him before his claim was settled, he complained more than ever of pain in his back, and called out loudly when touched upon his clothes. While sitting in his chair he could move his legs in any direction required of him, though much persuasion was necessary to get him to move them at all. He suddenly vomited during our visit, without any precedent sign of nausea or retching. Asked to walk across the room he essayed to do so after the manner already described. There was no tremor of the legs during progression, and nothing like ankle-clonus or the gait which is seen when there is secondary degeneration of the cord. Subsequently, on being asked to go into the next room he began to do so, but almost immediately fell down flat on the floor, whence he was lifted and carried away. A very large claim for compensation was preferred, and was arranged two years after the accident, not, however, without a resort to litigation. He shortly afterwards left the house in which he had been living, and for some time it was not known where he was. Forty-two months, however, after the accident he was fortunately seen by one of the medical men who had visited him during his long illness, and he found him in perfect bodily health and vigor and father of another child. It should be stated, as having an important bearing on the case, that the man's previous history was bad. He was always very irascible and some years previous to the accident he had been laid up with sunstroke. There was also some doubtful history of insanity in his family."

The Loss of Memory.—The loss of memory complained of by the litigious sufferer is nearly always a volitional defect, and a case is related where the patient was utterly unable, according to her own story, to remember any of the details of her previous life and *not even her name.* Yet she recounted with great minuteness all the circumstances of the accident and showed intellectual vigor which, to say the least, was suspicious. The real state, in ninety-nine cases out of a hundred, is that we so often find in hysteria and hypochondriasis. Emotional depression, manifested by whining complaints, lachrymose concentration upon the possible termination of the suit and the frequent repetition of the story of the accident, show the bur-

den of his thoughts. I have never witnessed really insane symptoms in uncomplicated spinal shock and I do not believe such are ever presented except where there has been head injury or advancing degeneration of the spinal cord.

Hæmoptysis with Spinal Concussion.—In opposition to the case I have mentioned in which hemorrhage from the lungs occurred at the time of the accident, is one reported by Page, in which a malingerer claimed that a profuse hemoptysis had occurred after a slight collision. A man of forty five received a slight blow on the knee and another on the sternum, began to complain of nerve symptoms two weeks after the accident and took to his bed where he remained for two months. His complaints were very much out of proportion to his actual suffering. The blood he raised evidently came from very congested fauces. Eleven months afterwards a settlement was made with the railroad company, and two years afterwards it was ascertained that he had been at work for a long time, and was apparently in perfect health.

Sprains and their Results.—As the result of an accident we may be furnished with symptoms of pain which may be due to injury of parts outside of the vertebral column and arise from sprain or muscular contusion.

Sprains of the spine are much more apt to follow injuries in which the body is twisted than where the force is directly applied. In the former case the pain will be diffused and general, while of course local blows will give rise to corresponding pain and stiffness. Occasionally we may find symptoms which are indicative of temporary disturbance of the functions of the spinal cord. A violent wrench may perhaps stretch the spinal nerve roots, causing painful symptoms, but I have never seen more than this, although Holmes reports a case in which there was some disturbance of motion. His case may be presented for the purpose, if nothing else, of showing how easy it is to be deceived by a collection of symptoms which rapidly disappear, but which may perhaps be referred to grave disease of the cord itself.* "A man, aged 31, while engaged in amusing his infant on the floor, and stooping on his hands and feet, was springing forward when he tripped and rolled over with his head under him. The weight of his body came with an impulse on his neck and gave him much pain from the twist it caused. He lay motionless on his back for

**A System of Surgery*, etc., Vol. 1, page 789, American Edition.

ten minutes. When he attempted to move either his arms or legs, he found himself unable, and he had a sense of numbness and pricking throughout the body. His legs gave way under him as if he were intoxicated, when trying to stand. On being brought to the hospital it was necessary to carry him into the ward. When lying on the bed he moved both upper and lower extremities, but in a feeble and forced manner. Sensation was not lost, only impaired ; he was able to tell correctly what part of his body or limbs were touched. Within twelve hours both motor power and sensation were restored, and the paralytic symptoms did not afterwards return. He complained of acute pain in the neck, which was aggravated by the slightest motion of the head, and they therefore kept his head perfectly still. He lay in bed with his neck sunk on a low soft pillow, propped around with sandbags. On examining the neck the chief tenderness was at the site of the fourth cervical vertebra, and there deeply seated swellings could be perceived. The treatment consisted principally in the enforcement of absolute rest for the neck, with the application continually of iodine, a plastic shirt or support reaching from the shoulder to the back of the head having been prepared. He was allowed in a month to leave us, and he could then perform the nodding but not the rotatory motions of the neck. When trying the latter he turned his whole body around. In nine weeks the movements of the body seemed to be quite restored, but he was kept in the hospital for precaution's sake three weeks longer. He returned to his occupation, that of a shoemaker, and called several times subsequently to show that he was well."

Serious falls and injuries may give rise to sprains, which are perhaps followed by swelling or even by ecchymosis, but very often there is no vertebral or spinal disease ; and it does not do for us to too hastily form a bad prognosis in cases of this kind.

A veritable lumbago of traumatic origin may be caused in the same way that it is by a fall upon an icy pavement. In some cases we find muscular rupture which may follow the resistance dependent upon a fixed attitude the individual may assume when he sees that a collision is inevitable. The separation of muscular fibres or ligamentous attachments give rise to localized obstinate pain, which is aggravated by pressure or movements of a particular kind, such as bending over or twisting the body. I can recall two cases where very great suffering followed a separation of some of the attachments of the spinal

muscles from the vertebral processes; and in one of these cases a very extensive rupture followed an accident which resulted from the front wheels of an ambulance dropping suddenly into a deep hole, and as a consequence an army officer who occupied the rear seat was thrown violently upwards and forwards, so that his head struck the top. Recovery followed a period of great suffering. In another case a woman fell into a sewer opening and the result was a considerable rupture of the fibres of the latissimus dorsi and the trapezius, resulting in impairment of the movements of the arms and head. She was unable to use her arm and could not attend to her household duties; she received handsome compensation from the city. In such cases as these large verdicts should not be expected, for beyond the immediate pain and possible swelling and discoloration and subsequent temporary incapacity, there is very little chance of permanent after-effects, and juries should not be prejudiced by the complaints of the patient, which may become tinged with hypochondriasis.

The Fear of Moving.—Page refers to the *fear of moving* which may result from a constant dwelling upon a slight painful disturbance. "Ask any man," says he, "who has had a severe lumbago, whether from a sprain, from rheumatism, or from cold, if he has not at the same time felt a strange sense of difficulty in moving his legs. Brisk walking becomes impossible; the effort to put one leg before the other must be unnaturally great; fatigue comes on early and the patient complains to you that his legs feel weak and as if he could hardly move them. Free micturition may likewise be interfered with from lack of the natural support and help which the lumbar muscles provide when this act is being performed. Constipation arises from the same cause. Thus it becomes nothing more nor less than natural for the friends to say that the patient is paralyzed, and paralyzed from severe injury to the spine. If we do not avoid this fallacy and do not correctly interpret this state of things, we shall add greatly to the dread which, after railway collisions, may be very real, that 'paralysis is going to supervene.'"

He relates this case: "A man who had received such injuries as we have described, and was confined to bed in consequence, needed three persons to help him out of bed every time he wanted to pass water during the day. To himself it appeared wholly unaccountable and extraordinary that whenever he woke in the night he could jump naturally out of bed

without any help for the same purpose. It need hardly be said that the case was perfectly genuine."

Pain and its Character.—Great care should be taken not to confuse the vague symptoms, among which is a spinal pain that may arise from lithæmia; and it is quite probable in some subjects that anxiety, voluntary inaction and perhaps a tendency to the gouty vice may account for many of the symptoms alleged to be due to the injury. We are to carefully note the relation of the pain, whether it be increased by movements or by the assumption of the erect position; whether it be associated with sciatica, whether paresthesia, or if it is aggravated by changes in temperature. We should always bear in mind that a severe injury of the spinal column and its contents is by no means easily produced because of the provisions made by nature for the protection of this part of the body. Not only, as it has been seen, is the spinal cord surrounded by fluids and tough membranes, but it is inclosed by elaborately connected bones separated by pads of cartilage which act as buffers, obviating the transmission of any severe shock and it is protected behind by large masses of muscle and fascia.

Although such an accident is improbable, the theory has been advanced by Hilton that when an individual falls backward, the spinal cord obeying the law of gravitation, may be thrown backwards, dragging the finer sensitive and motor nerves, giving rise to abnormal sensations of a light grade, and such may be the case with the history of a blow. In other cases, as Page has shown, an injury of the sensory nerves outside of the spinal canal may account for much of the pain that may be supposed to be of intra-spinal origin.

Pain Rare in Organic Disease.—Gower's observations upon the connection of pain with spinal disease are exceedingly practical. He calls attention to the fact that its existence in connection with abdominal and cardiac affections is so common and misleading that when uncomplicated its diagnostic value is not as great as it is usually supposed to be; and it is no exaggeration to say that of a hundred patients who complain of spinal pain, in ninety-nine there is no disease of the spinal cord. This coincides with my own observations, and of a large number of patients that have come under my charge from time to time, I have found that uncomplicated disease of the cord itself was not attended very often by local tenderness, while in meningitis or vertebral disease the reverse was true.

Surgical Accidents.—In some cases of spinal injury, it will be alleged that a shortening of one lower extremity has been caused, and in a case I examined recently with Dr. Peabody this was claimed to be the fact. It however transpired that all the trouble had been referred by the patient to what she was told was the unsound limb, although we did not find any paralysis of either, or any thing to account for the shortening. To our surprise we found that the left limb was three-quarters of an inch longer than the right; but upon consulting various statistics it appears that a large number of perfectly healthy persons present this congenital defect, so it must be borne in mind in these cases that after all such discrepancies often have nothing to do with disease.

Dr. Page's Tables.—Page has tabulated 234 cases of spinal injury received in railroad accidents, and it is curious to note that the large majority of these are tinged with a coloring of imposture, and it would appear that in cases where the largest damages were asked for, and where litigation was most bitter, the suspicion of malingering was generally evident. In many of these persons there existed other diseases, and just how much the symptoms were due to other agencies than the injury itself it is difficult to say. Case II. for instance suffered from sciatica, rheumatism and aortic regurgitation. This patient, soon after the settlement of the case, even after showing some improvement, was found dead in his bed; and his death was undoubtedly due to cerebral embolism. Several of the litigants had been hard drinkers before the various accidents, and many of the nervous symptoms were undoubtedly occasioned by acute alcoholism. And in a case reported by Dr. Fletcher, that of a man who died twelve months after an accident, which was ascribed to be the cause of his death, it was clearly proved that both before and after the alleged injury he had several attacks of delirium tremens In another individual, the subject of a diabetes which ultimately carried him off, it was claimed that the symptoms of this disease were entirely due to the shock. Page states that the diabetes was not of that traumatic variety described by Dr. Buzzard.

Bright's Disease and Spinal Injuries.—A bad injury may be alleged to be the cause of renal disease. When the lumbar region is involved there may be hematuria. In some cases, where spinal injuries have thus resulted, and where there is advancing renal disease, we must not be too ready to connect such a condition directly with the fall, for there may

have been pre-existing nephritis or other renal difficulties. Le Gros Clark is disposed to disbelieve in the existence of disease of the kidneys as a consequence of injuries to the spine. Holmes speaks of a case in which a gentleman claimed compensation for injuries which he declared to be the result of a railway accident. He asserted that he suffered from Bright's disease of the kidneys, which was directly produced by a blow upon the back, and the injury consisted in "a bruise over the right ilium and the side of the loins. As he walked some distance for his pleasure and took a long journey shortly afterwards, it may be inferred that the contusion was not severe. On the following day he observed blood mixed with his urine, and he continued for four more days to pass blood. On examining the urine at that time, his medical attendants found albumen contained in it, and they particularly stated that the quantity of albumen was larger in proportion than could be accounted for by the presence of the blood. During the whole period from the date of the accident to that of the trial, eleven months, the urine was found to contain albumen, and the view contended for by the witnesses in his favor was, that albuminuria had been caused by injury inflicted on the right kidney in the collision. On the part of the railway company, it was asserted that previous to the accident the gentleman had been subject to eczema, and that shortly before it he had been cured under treatment; accordingly the medical witnesses on that side, the writer being one, argued that albuminuria was known to follow eczema on its being cured, and for that and other reasons which could not be stated they expressed a strong opinion that the plaintiff was suffering from the disease when he met with the accident, and that the injury could not have brought it on. The jury nevertheless awarded heavy damages for the sufferer."

In conclusion I may again refer to the behavior of many of the patients who bring suits for imaginary injuries, and I cannot use more forcible words than those of Page:

"With glib facility of tongue he talks of the frauds which are so notorious upon railway companies, but his own character is, and always has been, above suspicion. His complaints are many and grievous, but yet he would not make them worse than they are, bad enough though they be to keep him from his work, which his doctors urge him to resume. Occupation is impossible; he cannot leave the house; and his

religious sense is shocked that for so long he has not been to church. He can bear no noise. He cannot read, and his only diversion is to hear his Bible read to him by his children or his wife. He is pleased to see you, for he knows how deep and true an interest you take in his wretched state; and he is ever ready to fall in with—but not to adopt—the suggestions you may make for his comfort and the improvement of his health. Once more, as you leave him, he assures you with Pharisaic unction, that he is not as other men, and that he would be the last to try and make money out of the affliction with which he has been visited. His speech always betrays him, and exposes the pious fraud."

Fraudulent Pension Claims.—Pension boards are sometimes petitioned by individuals who claim disability arising from disease or injury of the nervous system due to accident or exposure in the line of duty. I have lately heard of a man who during the War of the Rebellion was struck upon the buttocks by a piece of shell, but his immediate injuries were slight. A few years ago, after a period of good health, he developed spinal symptoms, indicative of myelitis and became paraplegic. The claim of the man and his physicians was that the injury was the direct cause of the present disease, which it is claimed is primarily vertebral. I am told that the recent symptoms were sudden in their onset and symptomatic of disease of a part of the cord that could not possibly have been injured in the accident.

All manner of bogus attacks of paraplegia are alleged to result from spinal injuries by veritable "old soldiers," but often it is possible to find the history of alcoholism, syphilis, or subsequent exposure, or the symptoms will not bear close examination, and come under the class of cases so often claimed to be the result of "spinal concussion."

An Analysis of Nine Personal Cases of "Railway Injury" (chiefly spinal).

No.	Sex.	Age.	Form of Accident	Injury.	Date of Settlement.	When Last Heard of after Accident.	Condition When Last Heard of.	Comments.
1	M.	47	Collision and "telescoping."	Patient in water-closet; thrown violently against side of car; injury of left side; Hemoptysis: rode home; almost immediate development of sensory symptoms, deepening into anesthesia of upper and lower extremities; paraplegia of light grade; exaggerated tendon reflex in left patellar tendon; stiffness of back; pupils unequal; pulse intermittent; severe pain in legs; hysterical and childish; memory enfeebled; has genuine anxiety for relief; breathing embarrassed and rapid; optic disks both congested.	3 months.	One year and a half.	Great improvement and able to attend to his duties as counsel. Still suffers some; legs weak.	A genuine case of real injury of a light grade. Disappearance of symptoms under proper treatment.
2	M.	63	Collision when one train was at a standstill. Patient in a front car.	Patient asleep at time of accident; considerably shaken up; managed to get home unassisted, though suffering from great back pain; he was however able to assist passengers, but was obliged to desist. Suffered from cerebral congestion, insomnia, and great excitement; constricting band, shortness of breath; attempted to go to business but obliged to seek his bed; incontinence of urine; jarring aggravated spinal pain, and could not move about for many months without suffering. Distress caused by pressure over the entire dorsal region; cannot rise without difficulty; no anesthesia in lower extremities, but delayed sensation; marked loss of muscular power in lower extremities; exaggerated reflexes; stumbles and shuffles in walking and his toes come in contact with slight obstructions in the pavements; goes up and down stairs with difficulty; pupils normal; has undergone a great change in character; anemic and looks poorly.	About 4 months.	13 months.	After a residence in warm climate has improved greatly. Still unable to do much work. Walked with a cane.	A serious functional condition occurring from a trivial cause. The only person in his car who made a claim. The question of his age arises as a predisposing cause.

No.	Sex.	Age.	Form of Accident.	Injury.	Date of Settlement.	When Last Heard of after Accident.	Condition When Last Heard of.	Comments.
3	M.	30	Telescope accident in a tunnel.	Forcibly hurled forward in a shattered car and jammed between broken seats. Insensible and carried home; hit upon the head; symptoms developed rapidly; ataxic walk; no paralysis; tendency to topple backwards; no atrophy of lower extremities; reflexes rather active; no disturbance of sensation; headache (sub-occipital), which has lasted for some months; complains of weakness of sight; hysterical and tremulous.	About 2 months afterwards.	4 months.	Patient worse. It is claimed that he has shown symptoms of mental weakness.	The patient's symptoms when I examined him were largely due to bromism, and if real cerebral disease existed it was masked. Patient honest in his statements.
4	M.	55	Claims that foot was caught in gate of car upon elevated R. R.	He suffered a wrench producing weakness and pain in the back and the left leg, and a variety of subjective symptoms and feebleness of vision.	Has not yet been settled.	2 years.	Patient's condition the same; he attends to his duties and no one would suppose he had anything the matter with him.	This man is undoubtedly a malingerer. The accident that he describes could not have happened, and he could not have preserved the upright position and at the same time have been dragged the length of the station.
5	M.	50	Car ran into bumper, throwing him with great force in the corner of the car.	Left side injured; he was dazed but able to reach his store, where he remained all day. There was an abrasion over the left eye, over the left elbow there was a laceration and sprain so that he could not flex his forearm. Arm swollen and discolored; pupils unequally dilated; pains in back of neck; numbness of legs and feet: vertigo; tongue protruded on right side.	——	One year.	Patient hysterical; no loss of power; muscles well nourished; tendon reflex on right side slightly increased; spinal pain and tenderness; pupils contract readily and evenly; tongue points to left side.	An honest case, chief injury being that of the left arm. The nervous symptoms were insignificant.

No.	Sex.	Age.	Form of Accident.	Injury.	Date of Settlement.	When Last Heard of after Accident.	Condition When Last Heard of.	Comments.
6	M.	45	Tunnel accident.	Patient received serious head injuries and was unconscious for some time; no fracture of skull, however; many severe scalp wounds. In bed for several months. Claims loss of power, both mental and physical; inability to walk, except with great difficulty; incontinence, and it is asserted by his physician that he has cerebro-spinal sclerosis.	——	Several months.	Hysterical to a marked degree. No evidence of organic disease whatever. Story of pains very much exaggerated; tendon-reflex normal; no anesthesia; want of co-ordinating power assumed; voluntary weakness on right side; contradicts himself. Patient cold, easily agitated and tremulous. No retinal disease.	An exorbitant claim.
7	M.	38	Collision.	Immediate disability, rapidly developing irregular paraplegia, with atrophy; active reflex and well defined symptoms of myelitis.	1 year.	18 months.	Condition little improved; incontinence of urine and feces, a disagreeable symptom.	A moderate claim which was paid in full.
8	W.	38	Arm caught in gate.	Claims wrench to spine; local injury of left hand and forearm; great pain in back; inability to walk without difficulty. Claims also paralysis of 2d and 3d fingers. ("Litigation" symptoms.)	——	Two years.	Examination revealed that paralysis was bogus and chiefly volitional. The muscles, even those of the forearm, all contracted well with minimum currents. She could when off her guard help herself, and use the palsied (?) fingers. Her spinal pain was inconstant and referred to new situations when expectant attention was excited.	An outrageous case. A woman who has figured in the Courts and as a lecturer upon sensational topics. She constantly referred to her ailments in a manner strongly suggestive of malingering.
9	M.	40	Collision.	The man left the car and went up town with an injured woman. He had a few slight wounds, and it is claimed a broken rib. He boasted of his intention to sue company. Brought into court upon litter, moaning and claiming to be paralyzed. No objective sign of any kind found. Examined carefully but no evidence of disease was detected. His electric sensibility and muscular contractility were perfect.	——	Several years.	He was able to go about and had moved out of town to escape surveillance during the legal appeal. In New York his behavior was very different from that when away.	An unmitigated fraud. After leaving Court he ran up the front steps and rang his own door bell. The suit is probably the result of a conspiracy.

APPENDICES.

APPENDIX A.

The labors of the Germans have materially altered the nomenclature of insanity during the past few years, and several American physicians have adopted with modifications the classification of Krafft-Ebing, which is the best.

"A. MENTAL DISEASES OF THE NORMAL BRAIN—I. *Psychoneuroses:* 1. *Primary, curable diseases;* a. *Melancholia*—a. simple Melancholia; B Melancholia with stupor; b *Mania*—a. Maniacal exaltation. *β* acute mania; c *Stupidity* (primary dementia) or curable dementia; d, *confusional insanity.* (Wahnsinn). 2. *Secondary, incurable diseases;* a Chronic delusional insanity; b. *terminal dementia—a* with agitation; B. with apathy.

II. CONDITIONS OF MENTAL DEGENERATION. a. *Constitutional affective insanity* (folie raisonnante, reasoning insanity); b, *moral insanity;* c, *primary monomania,*—a with delusions of persecution; B. with delusions of ambition; d with imperative conceptions; c, *insanity from Constitutional neuroses*—a epileptic; B, hysterical: x, hypochondriacal; f. *periodic insanity* (folie circulaire.)

III. DISEASES OF THE BRAIN WITH MENTAL DISTURBANCES PREDOMINATING—a *Paralytic dementia;* b, *cerebral-syphilis;* c, *chronic alcoholism;* d, *senile dementia;* e, *acute delirium.*

B. Conditions of Arrested Mental Development. *Idiocy* and *Cretinism*—" (Folsom).

APPENDIX B.

Primary Delusional Insanity: A term applied sometimes to the variety of insanity called by many authors *monomania.* According to Folsom and others who use this name there are three forms. 1. That characterized chiefly by delusions of persecution and suspicion. 2. That by delusions of self-importance (the delire de grandeur and megalomanie of the French—a form which has been called *Paranoia*—probably belong to this class), of personal power, etc. 3. A form in which morbid sensory impressions are transferred into delusions.—As a rule primary delusional insanity

is incurable, though it may be attended by periods of evident improvement or almost perfect recovery. The end is often dementia. Hallucinations are sometimes presented especially in the third form to which the term *sensorielle verrücktheit* has been applied.

Primary Confusional Insanity is a form of mental disorder of rather unexpected and sudden development attended by fever, delirium which is very incoherent and confused (from whence the name)—unsystematized delusions and a phase of mental disturbance which somewhat resembles that of typhoid fever or toxaemia—The prognosis is usually good, and recovery is rapid though there are many incurable cases.

APPENDIX C.

Katatonia is a term applied to a variety of insanity of a circular form manifested by melancholia and by a disposition to catileptiform rigidity which may amount to a well marked general convulsion. This condition should be differentiated from the rigidity which is often present in simple melancholia. There may be a condition of erethism which is expressed in religious ecstacy or the various exalted states described by Charcot. Hallucinations, and delusions of personal importance, and great loquacity of an inconsequential kind are not rare, while delusions of poisoning are frequently presented.

APPENDIX D.

It is somewhat comforting to those who stoutly maintained that Guiteau was responsible, to find Blanford and other experienced and careful observers who have had ample opportunity to examine all the evidence, inclining to their view of the case, and this despite the dubious findings of the "commission" who claimed to have discovered autopsical results when such were in fact really due to accidental causes.

APPENDIX E.

"Systematized delusions"—are three in which the premises are false but the insane belief in the result of logical reasoning.

"Unsystematized" delusions are those in which the deranged mental processes cannot be analyzed—the erroneous belief being an intuitive conviction—which is impossible of explanation.

APPENDIX F.

The condition of the mind in the dying state is one that is likely to arise in determining the integrity of the disposing powers of

the individual. It cannot be denied that the last hours of life are frequently attended by mental obscuration or perversion even when such does not appear to be the case to outsiders, and a person with some assistance may be helped to sign and apparently understand a will. Some diseases when the cause of death is toxaemia or great exhaustion must sometimes interfere with the clear exercise of judgment. An aged man whose will was lately the subject of contest died after a week's illness the nature of which was strangulated hernia and peritonitis—six hours before death he was made to sign a will notwithstanding the fact that a short time after he was so delirious that it required the efforts of several men to hold him down, and he presented the sign of collapse, yet he was pronounced by the consulting physician in his case to be of sound mind.

APPENDIX G.

The validity of the will of a suicide is sometimes questioned. The last hours of most suicides are as a rule marked by some expression which will enable one to determine the probable mental state; de Boismont, Winslow and others have collected an immense number of letters and written expressions of suicides, and the former has gotten together over three hundred and twenty letters which show the most diverse form of mental torture. Eighty-five wills were collected by this observer the greater number showing clear and intelligent disposing power and it does not follow that because a suicide has probably shown peculiarities of conduct before his death he has lost the power to discriminate in the matter of choosing the objects of his bounty. On the other hand there are many wills made by suicides which are irrational and absurd—some of which contain clearly insane directions in regard to the disposal of the body, the personal effects, etc. These should always be received with great caution.

APPENDIX H.

The plea of hysteria as a reason for divorce has never so far as I know been advanced in this country though in France its true importance has long been recognized. Doubtless many cases of incompatibility, have been dismissed as unworthy of judicial interference when the *res gesta* was mental trouble, of a light grade, and not mere bad temper. Many hysterical women are the subject of one or other of the light primary forms of congenital deficiency which brings with it more or less irresponsibility. A history of repeated and motiveless

irregularities of conduct, domestic infelicity intensified usually about the time of menstruation is suggestive of original brain disease. Sometimes hysterical women will bring divorce suits for imaginary wrongs—other than those I have detailed. A case of this kind came up in the French Courts the plaintiff being a woman named Vincent who had been placed by her husband in an asylum when she was suffering from an attack of hysterical insanity. After her discharge she brought suit for divorce alleging that his part in the commitment was a sufficient wrong which was denied by the tribunal.

Recourse to the Courts may be necessary in matters where the existence of hysterical or epileptic convulsions preceded the marriage and where the husband took to himself a wife when he was ignorant of any existing disease. Du Sauld calls attention to the fact that Doctors are frequently consulted by parents as to whether marriage is likely to put an end to epileptic or hysterical attacks, and they frequently meet with the assurance that such will be the case. There can be no doubt as to the falsity of any such conclusion in many cases, and concealment even with the best motives in the world is in every way an act of injustice.

APPENDIX I.

The existence of ample motive, deliberation and the taking of precautions that would ensure a painless death were shown in a case in which I was called shortly after the appearance of the first edition of this book. The suicide A. was a Jewish merchant who had become involved in heavy business reverses and became the debtor of B., a more prosperous and exacting fellow-trader of his own race who like his prototype in the Merchant of Venice was persistent in his demands to such a degree that a policy of Insurance was obtained in the Mutual Life Insurance Co. of this city. The affairs of the insured man grew worse and worse, and certain penalties for alleged irregularities of criminal nature were hinted at by the impatient creditor and the result was the suicide of the unfortunate man who first provided himself with a heavy block of lead and copper wire with which he fastened the former inside of his pocket and then leaped from the deck of a ferry-boat into the river. He had some time before his death assigned his policy to B. who sued the Company alleging that A. had committed suicide whilst insane. The only evidence brought forward was the antecedent mental depression of A. which was very natural under the circumstances.

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